

Support Products & Consumables



Solder, Desolder & Rework



SMT & Area Array Rework



Fume Extraction

Solutions and systems for soldering, rework and repair of electronics



PAGE[®]
worldwide

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ST Systems

Optional Items and Replacement Parts



Description	Part Number
Power Cord (Domestic Systems only)	1332-0094-P1
Power Cord (Export Systems)	1332-0093-P1
Fiber Cleaning Tool for Surface Mount Tips	1100-0232
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Replacement Sponge Filler (for sponge cleaning tip)	4021-0006-P5
Replacement Sponges for Tip and Tool Stand (Before 11-07)	4021-0008-P3
Power Switch (All ST Series)	1157-0081-P1
PCB ST 125 / 125E	6020-0185-P1
PCB ST 145 / 145E	6020-0186-P1
ST 75 / 115 Motor Pump Assembly	1336-0037-P1
ST 75 / ST 115 Pump Valve Sheet (IntelliHeat)	1338-0004-P1
Motor Pump Rebuild Kit for ST 75 / 115	6993-0260-P1
ST 25 PCB	6020-0188-P1
ST 30, ST 65 & ST 75 PCB (IntelliHeat)	6020-0208-P1
ST 50 & ST 115 PCB (IntelliHeat)	6020-0209-P1
ST 70 PCB	6020-0210-P1
ST 100 PCB	6020-0211-P1
ST 65 Venturi Kit	6993-0201-P1
ST 65 Air Inlet	1259-0099-P1
Bulk Head Fitting	1259-0081-P1
WJS 100 Printed Circuit Board (Main Control PC Board)	6020-0209-P1
TD 100 Handpiece, WJS version	6010-0165-P1
Tip and Tool Stand for TD 100	6019-0079-P1
Instant Set-back Cubby for TD 100	6019-0084-P1
TD 100 and ISB Cubby, Kit	6993-0296-P1
ST 70 Power Module Heat Level 5	1207-0446-01-P1
ST 70 Power Module Heat Level 5.5	1207-0446-02-P1
ST 70 Power Module Heat Level 6	1207-0446-03-P1
ST 70 Power Module Heat Level 6.5	1207-0446-04-P1
ST 70 Power Module Heat Level 7	1207-0446-05-P1
ST 70 Power Module Heat Level 7.5	1207-0446-06-P1
ST 70 Power Module Heat Level 8	1207-0446-07-P1
ST 70 Power Module Heat Level 8.5	1207-0446-08-P1
Fuse, 115V ST 25, 30, 50, 65, 75, 115	1159-0246-P5
Fuse, 230V ST 25E, 30E, 50E, 65E, 75E, 115E	1159-0213-P5
Fuse, 115V ST 100	1159-0275-01-P5
Fuse, 230V ST 100E	1159-0275-02-P5

MBT 250, 301 & 350

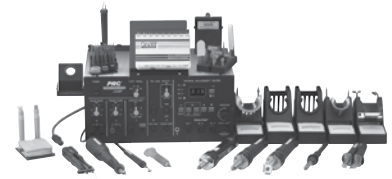
Optional Items and Replacement Parts



Description	Part Number
Fuse MBT 301 / 350 115V	1159-0275-01-P5
Fuse MBT 301E / 350E 230V	1159-0275-02-P5
Motor Pump Rebuild Kit (Pump date code of 37780 or lower MBT 250/E)	6993-0190-P1
Motor Pump Assembly MBT 250/E with date code of 37781 and higher	1336-0064-P1
Motor Pump Rebuild Kit for 1336-0064-P1 and 1336-0083-P1	6993-0260-P1
Motor Pump Filter	1309-0020-P1
Power Cord (Domestic Systems only)	1332-0094-P1
Power Cord (Export Systems only)	1332-0093-P1
Fuse, 2.0A SloBlo (MBT 250 Domestic Systems only)	1159-0247-P5
Fuse, 1.25A SloBlo (MBT 250 Export Systems only)	1159-0217-P5
Fiber Cleaning Tool for Surface Mount Tips	1100-0232-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Sponge Filler (for Sponge Cleaning Tool)	4021-0006-P5
Replacement Sponges for Tip & Tool Stand (SX, PS, SP)	4021-0008-P3
Sponges for Tip Maintenance Station	4021-0007-P7
Quick-Disconnect Insert (Male)	1259-0087-P1
Quick-Disconnect Receptacle (Female)	1259-0086-P1
Vacuum Tubing, Black Silicone 1370mm (54")	1342-0015-08-P1
Cable Marker Kit (Colored Tabs for hose/cord identification)	6993-0136-P1
Air Pressure Control Valve Assembly for MBT 250	1222-0081-P1
Vacuum, Panel Mount	1259-0085-P1
Main Power Switch	1157-0081-P1
Printed Circuit Board (MBT 250A / 250AE)	6020-0091-P1
Display Printed Circuit Board (MBT 250A / 250AE)	6020-0063-P1
Rubber Foot	1274-0021-P4
MBT 301 / 350 Motor Pump Assembly	1336-0083-P1
MBT 301 PCB	6020-0207-P1
MBT 350 PCB	6020-0204-P1
MBT-201 / 250 Motor Pump Assembly (Pump date code prior to 37781)	6993-0188

PRC Systems

Optional Items and Replacement Parts



Description	Part Number
Tip Redi-Rak	6021-0007-P1
Tip & Tool Stand Tip Redi-Rak (included with Standard Version)	6021-0008-P1
Tip and Vacuum Cup Tool	1100-0239
Cushion Grip Kit for ThermoTweez Handpiece (requires a 6019-0056 TT Tip & Tool Stand)	6993-0184
One Year Consumables Kit	6550-0020
Auto SnapVac Kit	6993-0193
Tip and Temperature Selection System (charts only)	5050-0251

PRC 2000 Replacement Parts

Description	Part Number
Motor Pump Assembly Kit (for desoldering function)	6993-0188
Pump Rebuild Kit (for desoldering function)	6993-0190-P1
Micro Pump Assembly (for Paste Dispenser)	1336-0027-P1
Low Pressure Pik Pump Assembly	1334-0021-P1
Power Cord (PRC 2000 Domestic Systems only)	1332-0094-P1
Power Cord (PRC 2000 Export Systems only)	1332-0093-P1
Fuses, 2.5 Amp, Type T (Slo-Blo)	1159-0260-P5
Fuse, 5.0 Amp, Time Lag (PRC 2000 Domestic Systems only) 115V	1159-0253-P5
Fuse, 12.0 Amp , (PRC 2000 Domestic and Export Systems)	1159-0257-P5
Air Pressure Control Valve Assembly	1222-0081-P1
Vacuum, Panel Mount	1259-0085-P1
Main Power Switch	1157-0052-P1
Fiber Cleaning Tool for Surface Mount Tips	1100-0232-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Sponge Filler (for Sponge Cleaning Tool)	4021-0006-P5
Replacement Sponges for Tip & Tool Stand (SX, PS, SP)	4021-0008-P3
Sponges for Tip Maintenance Station	4021-0007-P7
Quick-Disconnect Insert (Male)	1259-0087-P1
Quick-Disconnect Receptacle (Female)	1259-0086-P1
Paste Dispense Tubing, Clear PVC 915mm (36")	1325-0003-10-P1
Vacuum Tubing, Black Silicon 1370mm (54")	1342-0015-08-P1
Cable Marker Kit (colored tabs for hose/cord identification)	6993-0136-P1
Paste Dispenser Cubby	6019-0038-P1
Accessory Kit for Paste Dispenser	6993-0152-P1
Vacuum Cups for Pik-Vac Wand	6993-0154-P1
PCB Assembly, Microprocessor, PPS-400/E	6020-0072-P1
PCB, Display, PPS-400/E	6020-0073-P1
PCB, Multifunction, PPS-400/E	6020-0074-P1
Pressure Reservoir	1140-0034-P1
Foot Pedal MBT/PRC	6008-0115-P1
10cc Barrel Adapter	1259-0091-P1
SMR Cubby Kit	6019-0022-P1
Redi-Rak Handpiece Kit	6019-0023-P1
Motor Pump Filter	1309-0020-P1
Solenoid, 12V, 6W	1194-0016-P1
Terminal Post, BLACK	1205-0045-P1
Rubber Foot	1274-0021-P4
Rod, Connecting PRC 2000 / MBT-250 Pump	1338-0073-P1

ST Hot Air Systems

Optional Items and Replacement Parts



Description	Part Number
ST 300 Handpiece with Front Panel 115V	6010-0145-01-P1
ST 300 Handpiece with Front Panel 230V	6010-0146-01-P1
ST 325 Handpiece with Front Panel 115V	6010-0145-P1
ST 325 Handpiece with Front Panel 230V	6010-0146-P1
Handpiece Cubby ST 300 / ST325	6019-0048-P1
PCB ST 300 / ST 300E	6020-0163-P1
PCB ST 325 / ST 325E & ST 350 / ST 350E	6020-0190-P1
Fuse, 7 A, 125V ST 300 / 325 / 350	1159-0274-P5
Fuse, 5A, 230V, ST 300E / 325E / 350E	1159-0266-P5
Fuse, 1A, 125V ST 300	1159-0246-P5
Fuse, 0.5 A 125V ST 325 / 350	1159-0248-P5
Fuse, 0.5A 23 V, ST 300E / 325E / 350E	1159-0213-P5
PCB Support ST 350	6000-0287-P1
Calibration Nozzle ST 325 / 350	4028-2010-P1
ST 325/350 PC Software	1199-0019-P1
Board Holder Fingers	1321-0775-P1
Handpiece Vacuum Pump (FloPump)	1336-0035-P1
Blower Pump ST 300, ST 325 & 350	1336-0073-P1
Lo-Pressure Vac Pump for Air Vac Wand	1334-0021-P1
Vacuum Pump ST 300, ST 325 & 350 - Air Vac Handpiece	1336-0078-P1
Heater 115V ST 300 / 325 / 350	6010-0091-P1
Heater 230V ST 300 / 325 / 350	6010-0122-P1
Replacement Vacuum Pik Kit ST 300 / ST 325 115V	6993-0198-P1
Replacement Vacuum Pik Kit ST 300E / ST 325E 230V	6993-0256-P1
Replacement Vacuum Pik Kit ST 350 115V	6000-0283-P1
Replacement Vacuum Pik Kit ST 350E 230V	6000-0284-P1

ST Hot Air Systems

Optional Items and Replacement Parts



Description	Part Number
Power Cord, 115V (ST 300, ST 325, ST 350)	1332-0094-P1
Power Cord, 230V (ST 300E, ST 325E, ST 350E)	1332-0093-P1
PV-65 Handpiece (ST 300, ST 325, ST 350)	7027-0001-P1
Nozzle Adapter (ST 300, ST 325, ST 350)	4028-0001-P1
Hot Grip Removal Pad (ST 300, ST 325, ST 350)	1100-0307-P1
Hose Retention Kit	6018-0096-P1
Vacuum Cups	
Vacuum Cup Kit	6993-0196-P1
Vacuum Cup, Individual, 15.88mm (0.625") Diameter, BLUE	1121-0280-P2
Vacuum Cup, Individual, 10.16mm (0.400") Diameter, BLUE	1121-0281-P2
Vacuum Cup, Individual, 7.94mm (0.312") Diameter, BLUE	1121-0282-P2
Vacuum Cup, Individual, 4.95mm (0.195") Diameter, RED	1121-0382-P5
Vacuum Cup, Individual, 7.62mm (0.300") Diameter, RED	1121-0383-P5
Vacuum Cup, Individual, 12.70mm (0.500") Diameter, RED	1121-0384-P5
ST 500 Handpiece Fixture	6993-0258-P1
Swivel Ring	1321-0320-P1
ST 525 Board Holder 12"	6993-0253-P1
ST 550 Board Holder 18"	6993-0254-P1

Hot Air Nozzles

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured for special or non-standard applications. Contact PACE for more information. Alignment templates are included with BGA nozzle assemblies.

Standard Nozzles for ST 300 / 325 / 350 Systems

BGA Nozzles	Description	Part Number
	26.4mm x 26.4mm (1.04" x 1.04")	4028-5001
	22.3mm x 22.3mm (0.89" x 0.89")	4028-5002
	34.4mm x 34.4mm (1.35" x 1.35")	4028-5003
	12.3mm x 12.3mm (0.48" x 0.48")	4028-5004
	14.4mm x 14.4mm (0.57" x 0.57")	4028-5005
	15.5mm x 17mm (0.61" x 0.67")	4028-5006
	13.5mm x 15mm (0.53" x 0.59")	4028-5007
	10.5mm x 10.5mm (0.41" x 0.41")	4028-5008
	12mm x 13.3 mm (0.47" x 0.52")	4028-5009
	8.7mm x 8.90mm (0.34" x 0.35")	4028-5010
	24.3mm x 24.3mm (0.96" x 0.96")	4028-5011
	39.2mm x 39.2mm (1.54" x 1.54")	4028-5012
	41.7mm x 41.7mm (1.64" x 1.64")	4028-5013
	30.3mm x 30.3mm (1.19" x 1.19")	4028-5014
	16.3mm x 16.3mm (0.64" x 0.64")	4028-5015
	20.3 mm x 20.3 mm (0.80" x 0.80")	4028-5016
	20.3mm x 20.3mm (0.80" x 0.80")	4028-5017 (short adapter)
	36.8mm x 36.8mm (1.45" x 1.45")	4028-5018
	18.3mm x 18.3mm (0.72" x 0.72")	4028-5019
	31.3mm x 31.3mm (1.23" x 1.23")	4028-5020
	28.3mm x 28.3mm (1.11" x 1.11")	4028-5021
	15.3mm x 15.3mm (0.60" x 0.60")	4028-5022
	13.2mm x 21.2mm (0.52" x 0.83")	4028-5023
	18.5mm x 18.5mm (0.73" x 0.73")	4028-5024
	17.8mm x 17.8mm (0.70" x 0.70")	4028-5025
	25.7mm x 25.7mm (1.01" x 1.01")	4028-5026
	29.3mm x 29.3mm (1.15" x 1.15")	4028-5027
	24.3mm x 31.6mm (0.96" x 1.24")	4028-5028
	42.3mm x 42.3mm (1.66" x 1.66")	4028-5029
	43.3mm x 43.3mm (1.70" x 1.70")	4028-5030
	21.3mm x 21.3mm (0.84" x 0.84")	4028-5032
	32.3mm x 32.3mm (1.24" x 1.24")	4028-5033
	46.8mm x 46.8mm (1.84" x 1.84")	4028-5034
	20.3 mm x 24mm (0.80" x 0.94")	4028-5035
	16.3mm x 16.3 (0.64" x 0.64")	4028-5036 (short adapter)
	20.3mm x 20.3mm (0.80" x 0.80")	4028-5037 (small cup)
	6mm x 8mm (0.24" x 0.32")	4028-5501
	6.55mm x 8mm (0.26" x 0.32")	4028-5502
	Calibration Nozzle	4028-2010

Hot Air Nozzles

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured for special or non-standard applications. Contact PACE for more information.

Standard Nozzles for ST 300 / 325 / 350 Systems

Pattern Nozzles	Jet Spacing	Jet Length	Part Number
	4mm (0.16")	6.1mm (0.24")	4028-4001
	4mm (0.16")	10.9mm (0.43")	4028-4002
	7.9mm (0.31")	10.9mm (0.43")	4028-4003
	7.9mm (0.31")	13.5mm (0.53")	4028-4004
	7.9mm (0.31")	16mm (0.63")	4028-4005
	7.9mm (0.31")	18.5mm (0.73")	4028-4006
	11.7mm (0.46")	20.8mm (0.82")	4028-4007
	18.6mm (0.734")	11.68mm (0.460")	4028-4505
	10.4mm (0.41")	21.35mm (0.84")	4028-4506

Single Jet Nozzles	Shape of Jet Tubing	Nozzle Size (Nominal)	Part Number
	Curved, Round	3.0mm diameter (0.1" diameter)	4028-1001-P1
	Curved, Round	5.0mm diameter (0.2" diameter)	4028-1002-P1
	Curved, Round	8.0mm diameter (0.3" diameter)	4028-1003-P1
	Straight, Round	3.0mm diameter (0.01" diameter)	4028-1011-P1
	Straight, Round	5.0mm diameter (0.2" diameter)	4028-1012-P1
	Straight, Round	8.0mm diameter (0.3" diameter)	4028-1013-P1
	Flat Jet	13.2mm length (0.52")	4028-1021-P1
	Flat Jet	23.4mm length (0.92")	4028-1022-P1

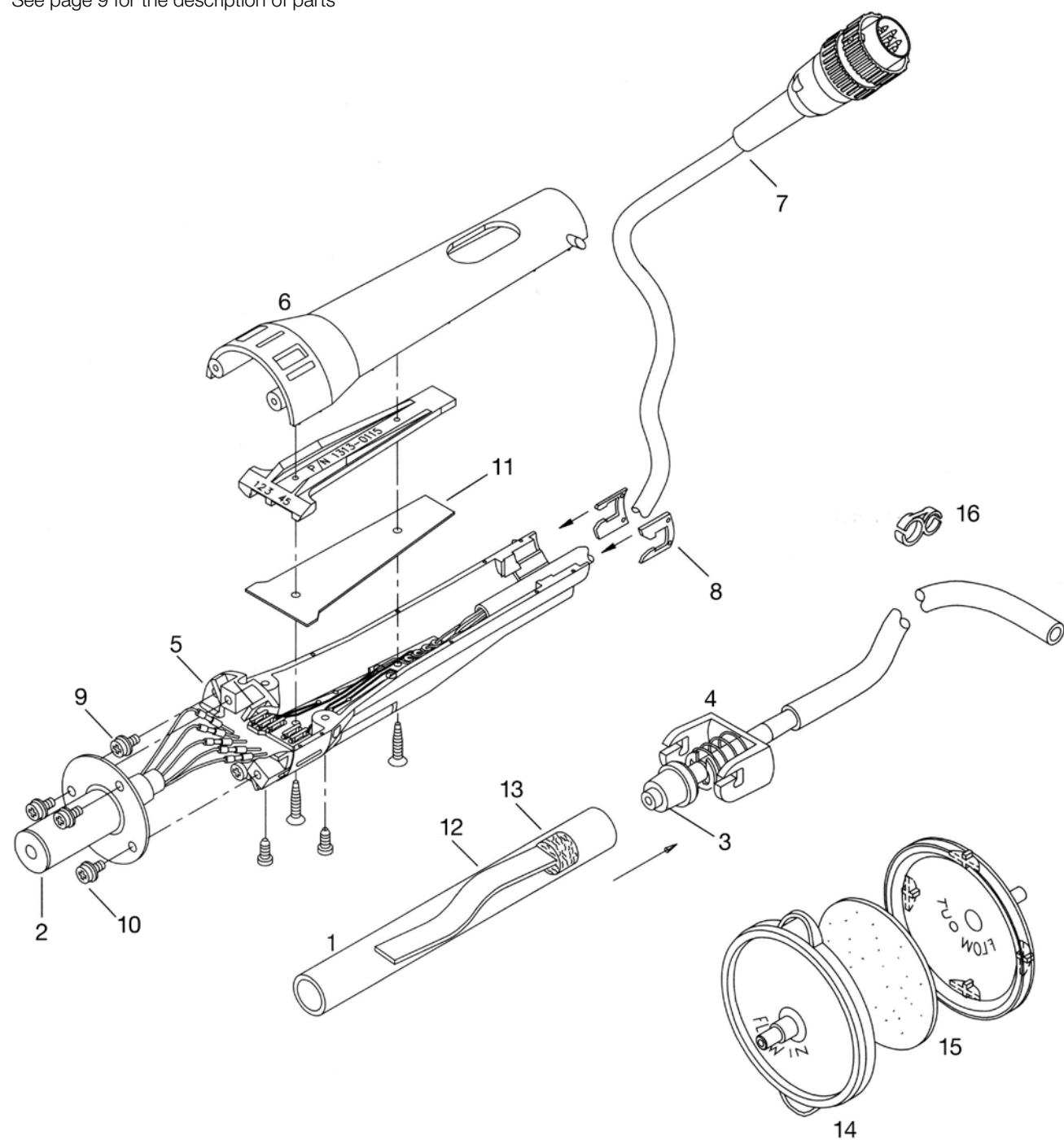
Pattern Nozzles	Nozzle Size (Nominal)	Part Number
	8.6mm x 12.1mm (0.34" x 0.48")	4028-2001
	10.3mm x 10.3mm (0.41" x 0.41")	4028-2002
	12.8mm x 12.8mm (0.51" x 0.51")	4028-2003
	12.8mm x 15.39mm (0.50" x 0.61")	4028-2004
	17.9mm x 17.9mm (0.70" x 0.70")	4028-2005
	20.5mm x 20.5mm (0.81" x 0.81")	4028-2006
	25.6mm x 25.6mm (1.01" x 1.01")	4028-2007
	30.6mm x 30.6mm (1.20" x 1.20")	4028-2008
	38.9mm x 38.9mm (1.53" x 1.53")	4028-2009
	18.2mm x 24.2mm (0.72" x 0.95")	4028-2501
	17.1mm x 17.1mm (0.67" x 0.67")	4028-2502
	27mm x 27mm (1.06" x 1.06")	4028-2503
	31.95mm x 31.95mm (1.26" x 1.26")	4028-2504
	31.6mm x 31.6mm (1.24" x 1.24")	4028-2505
	34.7mm x 34.7mm (1.37" x 1.37")	4028-2506
	27.2mm x 27.2mm (1.07" x 1.07")	4028-2602
	11.5mm x 11.5mm (0.453" x 0.453")	4028-3002
	15.5mm x 15.5mm (0.610" x 0.610")	4028-3004
	Calibration Nozzle	4028-2010

SX-70 Handpiece

SX-70 Replacement Parts Diagram

SX-70 parts Diagram

See page 9 for the description of parts



SX-70 Handpiece

SX-70 Replacement Parts



Item	Description	Part Number*
1	Glass Chamber	1265-0009-P1
2	SX-70 Heater and Seal Assembly	6010-0080-P1
	Front Seal, Heater	1213-0033-P1
3	Rear Seal	1213-0001-P1
4	Rear Seal Retainer Assembly	4010-0106-P1
5	Heat Dissipator	1360-0005-P1
6	Replacement Handle Kit (SX, TP, TJ) (includes Top/Bottom Plates, Heat Dissipator, and Hardware)	6993-0140-P1
	Replacement Hardware Kit (SX, TP, TJ) (includes Screws and Handle Clips)	6993-0189-P1
7	Switch and Cord Assembly (SX-70 only)	4010-0098-P1
8	Handle Clips	1209-0006-P5
	Replacement Button	1119-0119-P1
9	Dissipator Mounting Screws (mounts dissipator to handle)	1405-0534-P3
10	Heater Mounting Screws	1405-0395-P3
11	Solder Shield (comes with the purchase of any Heater Assembly)	1213-0072-P10
12	"S" Baffle	4010-0033-P1
13	Sodr-X-Tractor Filter	
	Package of 10	1309-0018-P10
	Package of 50	1309-0018-P50
	VisiFilter, Fixed	1309-0020-P1
14	VisiFilter, Replaceable	1309-0028-P1
15	Replaceable VisiFilter Elements	
	Package of 10	1309-0027-P10
	Package of 25	1309-0027-P25
	Package of 50	1309-0027-P50
	Tubing, Length 1370mm (54"), BLACK	1342-0015-08-P1
16	Black Hose Clamps	1321-0085-01-P6
	Hose Fitting, Female (Quick Disconnect)	1259-0086-P1
	Hose Fitting, Male (Quick Disconnect)	1259-0087-P1
	Tubing, Length (2") Translucent	1342-0001-01-P1
	Gender Bender Adaptor (Allows SensaTemp Handpieces to be used on IntelliHeat power sources)	6993-0278-P1
	SX Tool Stand	6019-0082-P1

*Endura tips can only be used for SX-70, SX-80 and SX-100/SX-90 with date code prior to 10/06.

SX-100 / SX-90 Sodr-X-Tractor

SX-100 / SX-90 Replacement Parts



	Item	Description	Part Number
		SX-100/SX-90 SensaTemp Handpiece	6010-0106-P1
		SX-100/SX-90 SensaTemp Kit (includes Handpiece, Tip & Tool Stand & Tip Tool)	6993-0213-P1
		SX-100/SX-90 Handpiece IntelliHeat	6010-0149-P1
		SX-100/SX-90 Handpiece Kit IntelliHeat	6993-0266-P1
		SX-100/SX-90 Tip and Tool Stand	6019-0060-P1
	1	FLUX/SODR TRAP (Package of 10)	1309-0054-P10
	1	FLUX/SODR TRAP (Package of 100)	1309-0054-P100
	2	SX-100/SX-90 Heater Assembly (Black Connector also fits SX-80)	6010-0107-P1
		SX-100/SX-90 Heater Assembly (Blue Connector only fits SX-100/SX-90's that come with Blue Connector heater)	6010-0163 -P1
	3	Handle Assembly (Includes the Switch, PCB, and Cord Assembly) SensaTemp	6010-0115-P1
	3	Handle Assembly (Includes the Switch, PCB, and Cord Assembly IntelliHeat)	6010-0162-P1
	4	Door Assembly	1119-0141-P1
	5	Front Seal	1213-0087-P1
	6	Rear Seal	1213-0086-P1
	7	Plunger Shaft	1261-0154-P1
	8	Plunger Lock	1500-0063-P1
	9	"C" Clips (3 pieces)	1348-0387-P3
	10	Spring "Long Side"	1221-0136-P1
	11	Spring "Short Side"	1221-0137-P1
	12	Door Lock	1119-0142-P1
		VisiFilter, Fixed	1309-0020-P1
		VisiFilter, Replacement	1309-0028-P1
		Replaceable VisiFilter Elements	
		Package of 10	1309-0027-P10
		Package of 25	1309-0027-P25
		Package of 50	1309-0027-P50
		Tubing, 1370mm (54") Length, black	1342-0015-08-P1
		Hose Clamps	1321-0085-01-P6
		Hose Fitting, Female (Quick Disconnect)	1259-0086-P1
		Hose Fitting, Male (Quick Disconnect)	1259-0087-P1
		Tubing, Silicon, 2" Length	1342-0001-01-P1
		Heater Set Screws	1348-0547-P10
		Button	1500-0064-P1
		Heat Sleeve Kit	6993-0229-P1
		Heat Sleeve Clip	1211-0064-P1
		Glass Flux Solder Trap Kit	6000-0212-P1
		Z-Baffle (for Glass Chamber)	4010-0115-P2
		Glass Chamber	1265-0011-P1
		Sodr-X-Tractor Filters for Glass Chamber	
		Package of 10	1309-0018-P10
		Package of 50	1309-0018-P50
		SX Tool Stand	6019-0082-P1
		Replacement Sponge for New Tool Stand	4021-0013-P3
		Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1
		Heater MTG Screws	1405-0534-P3
		Tip Tool	1100-0006-P1

SX-100 / SX-90 Desoldering Tips

Tips Selection:

One of the most important aspects for successful solder removal is the selection of the proper size tip. There are several points to keep in mind.

- 1 The Inside Diameter (I.D.) of the tip must be large enough to fit over the lead, while providing sufficient room so that air and solder can be drawn through the tip.
- 2 The Outside Diameter (O.D.) of the tip must be slightly smaller than the diameter of the pad to prevent tip contact to the board laminate and minimize the possibility of damage.

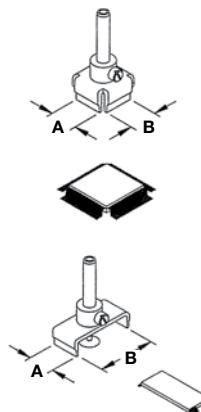


For the SX-100 / SX-90 - 3/16" Shank Diameter

Tips	Description	Diameter	SX-100/SX-90 P/N*	Endura P/N**
	Thermo-Drive	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0930-P5	1121-0625-P5
	Thermo-Drive	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0931-P5	1121-0624-P5
	Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0932-P5	1121-0626-P5
	Thermo-Drive	2.29mm (0.090") I.D. X 5.1mm (0.200") O.D.	1121-0933-P5	1121-0627-P5
	Thermo-Drive	4mm (0.16") I.D. X 5.1mm (0.200") O.D.	1121-0951-P5	
	Thermo-Drive, Flathead	1.27mm (0.050") x 2.28mm (0.090") I.D. x 2.79mm (0.110") x 4.82mm (0.190") O.D.	1121-0934-P5	1121-0821-P5
	Extended Reach Thermo-Drive	0.78mm (0.030") I.D. X 2.29mm (0.090") O.D.	1121-0935-P5	1121-0628-P5
	Extended Reach Thermo-Drive	1.02mm (0.040") I.D. X 2.54mm (0.10") O.D.	1121-0936-P5	1121-0629-P5
	Extended Reach Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0937-P5	1121-0630-P5
	ThermoMax	0.76mm (0.030") I.D. X 1.91mm (0.075") O.D.	1121-0938-P5	1121-0882-P5
	Precision	0.50mm (0.020") I.D. X 1.79mm (0.070") O.D.	1121-0941-P5	1121-0680-P5
	Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0942-P5	1121-0678-P5
	Precision	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0943-P5	1121-0679-P5
	Precision	1.52mm (0.060") I.D. X 2.79mm (0.110") O.D.	1121-0944-P5	1121-0690-P5
	Precision	0.635mm (0.025") I.D X 1.39mm (0.055") O.D.	1121-0949-P5	
	Precision	0.635mm (0.025") I.D X 1.14mm (0.045") O.D.	1121-0950-P5	
	Flo-D-Sodr	1.52mm (0.060") I.D. X 4.78mm (0.188") O.D.	1121-0945-P5	1121-0631-P5
	Flo-D-Sodr, Precision	0.50mm (0.020") I.D. X 1.78mm (0.070") O.D.	1121-0946-P5	1121-0681-P5
	Flo-D-Sodr, Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0947-P5	1121-0682-P5
	Flo-D-Sodr, Precision	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0948-P5	1121-0683-P5

*SX-100//SX-90 tips can only be used with SX-100/SX-90 heaters date code 10-06 or later. **Endura tips should only be in the SX-80.

SX-100 Surface Mount Removal Pik-Tips

Tips	Description	Tip Size A X B	Part Number
	TSOP-32	8.1mm (0.320") x 12.7mm (0.500")	1121-0566-P1
	TSOP-28	8.1mm (0.320") x 19.3mm (0.760")	1121-0567-P1
	TSOP-40	9.9mm (0.390") x 19.3mm (0.760")	1121-0568-P1
	TSOP-56	14.2mm (0.560") x 19.3 mm (0.760")	1121-0569-P1
	TQFP-28	8.2mm (0.322") x 8.23mm (0.3220")	1121-0571-P1
	TQFP-32	8.7mm (0.344") x 8.7mm (0.344")	1121-0572-P1
	TQFP-52	12mm (0.472") x 12mm (0.472")	1121-0573-P1
	TQFP-40	12mm (0.472") x 12mm (0.472")	1121-0574-P1
	TQFP-80	13.2mm (0.520") x 13.2mm (0.520")	1121-0575-P1
	TQFP-80/100	15.3mm (0.604") x 15.3mm (0.604")	1121-0576-P1
	PQFP-80/100	16.8mm (0.660") x 22.9mm (0.900")	1121-0603-P1
	TQFP-144	21.6mm (0.850") x 21.6mm (0.850")	1121-0604-P1
	TQFP-112	22.1mm (0.870") x 22.3mm (0.870")	1121-0605-P1

PS-90 Handpiece

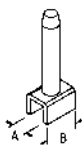
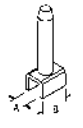
Optional Items and Replacement Parts

PS-90 Universal Soldering Iron



Description	Part Number
PS-90 Handpiece IntelliHeat	6010-0150-P1
PS-90 Handpiece Kit IntelliHeat	6993-0267-P1
PS-90 SensaTemp Soldering Iron Kit	6993-0199-P1
PS-90 SensaTemp Soldering Iron	6010-0131-P1
PS-90N SensaTemp Kit	6993-0275-P1
PS-90N SensaTemp Handpiece	6010-0116-P1
PS-90N IntelliHeat Handpiece	6010-0157-P1
PS-90N IntelliHeat Handpiece Kit	6993-0274-P1
PS-90 Cubby	6019-0081-P1
Lead Free Cubby with Green Insert	6019-0081-G-P1
Green Replacement Handpiece Insert for PS-90	1140-0083-G-P1
Replacement Parts	
PS-90 Heater Assembly (fits PS-80)	6010-0095-P1
PS-90N Heater Assembly	6010-0117-P1
PS-90 Heater Retaining Nut	1410-0122-P5
PS-90 Flared Ring	1500-0074-P5
PS-90 Flat Ring	1500-0076-P5
PS-90 Handpiece (IntelliHeat Version) with Green Comfort Grip	6010-0159-P1
PS-90 Tip & Tool Stand with Green Insert	6019-0074-P1
Replacement Sponge for New Tool Stand	4021-0013-P3
Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1
PS-90 SensaTemp Kit	6993-0199-P1

Surface Mount Removal Tips for PS-90

Tip (and Application)	Description	Tip Size A x B	Part Number
	SOIC - 8 (JEDEC)	5.05mm x 5.08mm (0.199" x 0.200")	1121-0390-P1
	SOIC - 14 (JEDEC)	5.05mm x 8.99mm (0.199" x 0.354")	1121-0391-P1
	SOIC - 16 (JEDEC)	5.05mm x 10.2mm (0.199" x 0.404")	1121-0392-P1
	SOIC - 28 (EIAJ)	10.6mm x 17.5mm (0.416" x 0.690")	1121-0442-P1
	Flat Blade Tip	A = 7.6mm (0.3")	1121-0512-P1
		A = 10.2mm (0.4")	1121-0514-P1
		A = 12.7mm (0.5")	1121-0473-P1
		A = 17.8mm (0.7")	1121-0416-P1
		A = 20.3mm (0.8")	1121-0497-P1
		A = 25.4mm (1.0")	1121-0448-P1
	Chip Component	3.56mm x 2.03mm (0.14" x 0.08")	1121-0303-P1
	SOT-23	1.6mm x 3.05mm (0.63" x 0.12")	1121-0304-P1
	TSOP-32	19.333mm x 8.1mm (0.76" x 0.32")	1121-0403-P1

PS-90 Single Point Soldering Tips



Pattern Nozzles	Jet Spacing	Jet Length	Part Number
	1/16" Chisel (High Capacity)	1.60mm (0.063")	1121-0414-P5
	1/64" Conical	0.40mm (0.016")	1121-0357-P5
	1/64" Sharp Bent Conical	0.40mm (0.016")	1121-0830-P5
	1/32" Conical	0.80mm (0.031")	1121-0336-P5
	1/16" Chisel	1.60mm (0.063")	1121-0335-P5
	1/16" Chisel Long Reach	1.60mm (0.063")	1121-0499-P5
	1/8" Chisel	3.20mm (0.125")	1121-0337-P5
	1/32" Chisel	0.80mm (0.031")	1121-0359-P5
	3/32" Chisel	2.40mm (0.094")	1121-0360-P5
	1/16" Chisel, Extended Reach	1.60mm (0.063")	1121-0533-P5
	1/64" Bent Conical	0.40mm (0.016")	1121-0363-P5
	1/64" Bent Conical	0.40mm (0.016")	1121-0828-P5
	1/32" Conical, Extended Reach	0.80mm (0.031")	1121-0527-P5
	3/16" Chisel	4.80mm (0.188")	1121-0358-P5
	1/16" Chisel (MicroFine)	1.60mm (0.063")	1121-0349-P5
	1/16" Chisel, Thermo-Drive	1.60mm (0.063")	1121-0510-P5
	1/32" Bent Chisel	0.80mm (0.031")	1121-0361-P5
	1/8" Chisel, Thermo-Drive	3.20mm (0.125")	1121-0518-P5
	3/32" Chisel, Extended Reach	2.40mm (0.094")	1121-0529-P5
	1/16" Bent Chisel, Long Reach	1.60mm (0.063")	1121-0500-P5
	1/64" Conical Long Reach	0.40mm (0.016")	1121-0528-P5
	Angled Mini-Wave, Fine Pitch	1.80mm (0.07")	1121-0564-P5
	Angled Mini-Wave	2.40mm (0.09")	1121-0610-P5
	Single-Sided Chisel, Fine Pitch	1.50mm (0.06")	1121-0563-P5
	Single-Sided Chisel	3.30mm (0.13")	1121-0406-P5
	Mini-Wave	3.30mm (0.13")	1121-0490-P5
	Flat Blade	6.60mm (0.25")	1121-0402-P1
	Flat Blade	10.2mm (0.040")	1121-0305-P5

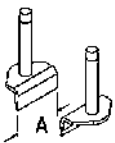
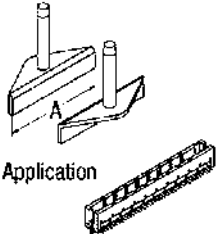
TT-65 ThermoTweez Handpiece



TT-65 ThermoTweez/Replacement Parts

Description	Part Number
ThermoTweez SensaTemp Handpiece	7025-0001-P1
Heater Assembly, with Sensor	6010-0082-P1
Heater Assembly, without Sensor	6010-0083-P1
Cushion Grip Kit	6993-0184-P1
Pads for Cushion Grips	1317-0029-P2
Plastic Grip (2 ea.)	1119-0123-P1
Replacement Hinge Kit	6993-0156-P1
TT-65 Handpiece IntelliHeat	6010-0151-P1
TT-65 Handpiece Kit IntelliHeat	6993-0268-P1
TT-65 Cubby	6019-0083-P1
SensaTemp TT-65 kit	6993-0207-P1

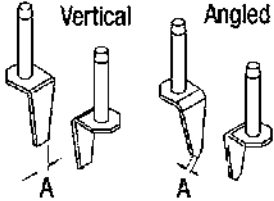
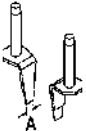
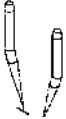
TT-65 ThermoTweez Handpiece Tips

Tip	Description	Tip Size	Part Number
	Narrow-body connectors, and SOIC Components	A=7.6mm (0.3")	1121-0512-P1
		A=10.2mm (0.4")	1121-0514-P1
	SOIC, SOJ, SIMMs Component	A=12.7mm (0.5")	1121-0473-P1
		A=17.8mm (0.7")	1121-0416-P1
		A=20.3mm (0.8")	1121-0497-P1
		A=25.4mm (1.0")	1121-0448-P1

TT-65 ThermoTweez Handpiece Tips



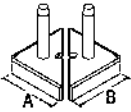
SMT Removal Tips

Tip	Description	Tip Size	Part Number
 Standard Wall: Thickness = 1.3mm (0.050") Application Chip Component	Chip Component (vertical)	A=0.76mm (0.03")	1121-0398-P1
	Chip Component (vertical)	A=2.0mm (0.08")	1121-0313-P1
	Chip Component (vertical)	A=4.1mm (0.16")	1121-0399-P1
	Chip Component (vertical) Small SOIC	A=6.4mm (0.25")	1121-0401-P1
 Thin-Wall: Thickness = 0.43mm (0.017")	Thin-Walled Chip Component (vertical)	A=0.76mm (0.03")	1121-0520-P1
	Thin-Walled Chip Component (vertical)	A=2.0mm (0.08")	1121-0521-P1
 Application Chip Component	1/64" Angled Fine Point Conical Chip Component	A=0.43mm (0.017")	1121-0517-P1

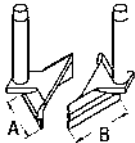
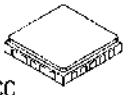
TT-65 ThermoTweez Handpiece Tips



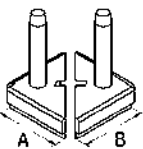
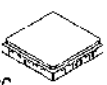
PLCC/PQFP Removal Tips

Tip	Description	Tip Size A x B	Part Number
 Standard Wall: Thickness = 1.3mm (0.050") Application PLCC  The ThermoTweez can also remove leadless components (LCCCs) if sized correctly. PQFP 	PLCC-20	6.86mm x 6.86mm (0.27" X 0.27")	1121-0316-P1
	PLCC-28	9.4mm x 9.4mm (0.37" x 0.37")	1121-0317-P1
	PLCC-32	12.2mm x 9.65mm (0.48" x 0.38")	1121-0352-P1
	PLCC-44, PQFP-84	14.5mm x 14.5mm (0.57" x 0.57")	1121-0318-P1
	PLCC-52, PQFP-100	17.0mm x 17.0mm (0.67" x 0.67")	1121-0319-P1
	PLCC-68, PQFP-132	21.9mm x 21.9mm (0.86" x 0.86")	1121-0320-P1
	PLCC-84, PQFP-160	26.9mm x 26.9mm (1.06" x 1.06")	1121-0321-P1

Thin-Walled Surface Mount Removal Tips

Tip	Description	Tip Size A x B	Part Number
 Application  LCCC	Removal Tips for Motorola Pager LCCC Packages and small, Fine-Pitch PQFPs	6.6mm x 6.6mm (0.26" x 0.26")	1121-0417-P1
	Wall thickness = 0.025" (standard height = 0.275")	9.16mm x 8.89mm (0.40" x 0.35")	1121-0425-P1

LCCC Removal Tips

Tip	Description	Tip Size A x B	Part Number
 Application  LCCC	Removal Tips for LCCC Packages and small, Fine-Pitch PQFPs	8.89mm x 6.35mm (0.35" x 0.25")	1121-0452-P1
	Wall thickness = 0.635mm (0.025") (reduced height = 0.2" for high mass boards)	21.6mm 21.6mm (0.85" x 0.85")	1121-0455-P1

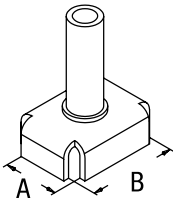
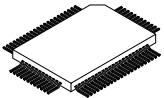
TP-65 ThermoPik Handpiece & Tips



TP-65 ThermoPik/Replacement Parts

Description	Part Number
TP-65 ThermoPik Handpiece SensaTemp	7024-0001-P1
Heater Assembly	6010-0081-P1
Handle Kit	6993-0140-P1
Hardware Kit	6993-0189-P1
Gender Bender Adaptor (Allows SensaTemp Handpieces to be used on IntelliHeat power sources)	6993-0278-P1
SX Tool Stand	6019-0082-P1

TP-65 ThermoPik Tips

Tip	Description	Tip Size A x B	Part Number
 Application Flat Pack  Note: The TP-65 ThermoPik requires an SX Tip & Tool Stand.	FlatPack Tip	16.8mm x 22.9mm (0.66" x 0.90")	1121-0322-002-P1
	PQFP-68 Tip (bumper pack)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0323-P1
	PQFP-64/80 (non-bumper)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0484-P1
	PQFP-84 Tip	18.3mm x 18.3mm (0.72" x 0.72")	1121-0324-P1
	PQFP-100 Tip	20.8mm x 20.8mm (0.82" x 0.82")	1121-0325-P1
	PQFP-132 Tip	25.9mm x 25.9mm (1.02" x 1.02")	1121-0326-P1
	PQFP-144	29.2mm x 29.2mm (1.15" x 1.15")	1121-0456-P1
	PQFP-208	30.0mm x 30.0mm (1.18" x 1.18")	1121-0544-P1
	PQFP-160 Tip	31.0mm x 31.0mm (1.22" x 1.22")	1121-0351-P1
	PQFP-196	36.3mm x 36.3mm (1.43" x 1.43")	1121-0483-P1

TJ-70/85 ThermoJet Handpieces & Tips



TJ-70 ThermoJet/Replacement Parts & Handpiece Tips

Description	Part Number
TJ-70 ThermoJet SensaTemp Handpiece	7023-0002-P1
Heater Assembly	6010-0084-P1
Handle Kit	6993-0140-P1
Hardware Kit	6993-0189-P1
Gender Bender Adaptor (Allows SensaTemp Handpieces to be used on IntelliHeat power sources)	6993-0278-P1
SX Tool Stand	6019-0082-P1
TJ 70 SensaTemp Kit	6993-0206-P1
TJ 70 IntelliHeat	7023-0003-P1
TJ 70 IntelliHeat Kit	6993-0292-P1

Tip	Description	Tip Size A x B	Part Number
	Small, Straight, Single Jet Tip	0.060" I.D.	1121-0366-P1
	Small, Curved, Single Jet Tip	0.060" I.D.	1121-0338-P1
	SOIC Tip (dual-jet)	A = 4.32mm (0.17")	1121-0330-P1
	Flat End Tip	A = 7.11mm (0.28") B = 1.88mm (0.074")	1121-0365-P1
		A = 6.10mm (0.24") B = 1.88mm (0.074")	1121-0371-P1

TJ-85 ThermoJet/Replacement Parts & Handpiece Tips

Description	Part Number
Heater Retaining Nut	1410-0122-P5
Flared Ring	1500-0074-P5
Heater Assembly	6010-0143-P1
Foot Pedal	6008-0115-P1
TJ-85 Handpiece IntelliHeat	6010-0153-P1
TJ-85 Kit IntelliHeat	6993-0270-P1
TJ-85 Cubby	6019-0081-P1
TJ-85 Handpiece SensaTemp	6010-0142-P1
TJ-85 Handpiece Kit SensaTemp	6993-0247-P1

Tip	Description	Tip Size A x B	Part Number
	Straight Nozzle	0.06" Inner Diameter	1259-0129-P1
	Curved Nozzle	0.06" Inner Diameter, Bent 60 Degrees	1259-0130-P1
	Flat Nozzle	0.24" X 0.074" Inner Flow Dimensions	1259-0131-P1

PACE Tip Kits

Many customers would like to try a variety of different tip shapes and sizes. PACE Tip Kits provide a variety of popular tip shapes and sizes.

PS-90 Soldering Iron Tip Kit

Description	Part Number
Chisel Tip Kit (Includes one of each of the following tips:)	6993-0210
1/16" Chisel	1121-0414
1/8" Chisel	1121-0337
3/32" Chisel	1121-0360
1/32" Bent Chisel	1121-0361
1/16" Thermo-Drive Chisel	1121-0510
3/16" Chisel	1121-0358
Extended Reach Single Sided Chisel	1121-0532
1/8" Thermo-Drive Chisel	1121-0518

Desoldering Tip Kit

Description	Part Number
SX-100/SX-90 Tip Kit (Includes one of each of the following tips:)	6993-0288-P1
Thermo-Drive (0.030"ID)	1121-0930
Thermo-Drive (0.040"ID)	1121-0931
Thermo-Drive (0.00"ID)	1121-0932
Thermo-Drive (0.090"ID)	1121-0933
Precision (0.020"ID)	1121-0941
Precision (0.030"ID)	1121-0942
Precision (0.040"ID)	1121-0943
Flo-D-Sodr (0.060"ID)	1121-0945
Endura tip kit, SX-80/SX-100/SX-90	6993-0212

TD-100 Thermo-Drive Soldering Iron

Optional Items and Replacement Parts



TD-100 Replacement Parts

Description	Part Number
TD-100 Handpiece (For Heatwise/Tempwise Systems Only)	6010-0132-P1
TD-100 Tip & Tool Stand Kit (Includes TD-100 and Stand)	6993-0242-P1
TD-100 Handpiece IntelliHeat	6010-0147-P1
TD-100 Handpiece Kit IntelliHeat	6993-0263-P1
Replacement O-rings	1213-0090-P5
Replacement Cord Assembly for TD-100 Handpiece	3008-0131-P1
HeatWise/TempWise Replacement Cord Assembly for TD-100 Handpiece	3008-0296-P1
IntelliHeat Cleaning Sponge, Tip & Tool Stands (SX, PS, SP)	4021-0008-P3
Soft Grip & Cubby Kit	6993-0241-P1
Replacement Soft Grips	1119-0161-P5
TD-100 Tip & Tool Stand	6019-0079-P1
Lead Free Cubby with Green Insert	6019-0079-G-P1
Replacement Sponge for New Tool Stand	4021-0013-P3
Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1
TD-100N Shroud Skirt	1259-0151-P1
Green Comfort Grip & Green Handpiece Insert for TD-100 Tip & Tool Stand Old Style	6993-0283-P1
Replacement Green Comfort Grips for TD-100, pack of 5	1119-0176-P5
Green Replacement Handpiece Insert for TD-100 (Before Nov 2007)	1140-0075-G-P1
Lead Free Cubbies, Inserts and Bushing part numbers:	
Instant SetBack Tip & Tool Stand for TD-100 with Standard Insert	6019-0084-P1

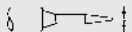
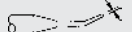
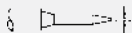
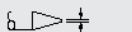
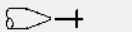
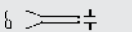
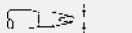
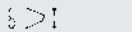
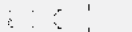
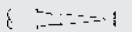
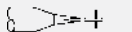
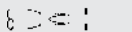
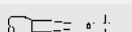
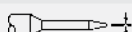
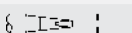
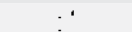
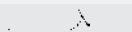
Description		Part Number
	Tip Case – Holds 10 Tips (Tips not included)	1310-0034-P1

WJS 100/TD-100 Standard Soldering Tips

WJS 100 Soldering Tips

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/32" Conical Sharp Extended	12.75mm (0.502")	0.8128mm (0.032")	1128-0001-P1
	1/64" Conical Sharp	9.144mm (0.36")	0.4064mm (0.016")	1128-0002-P1
	1/64" Conical Sharp Bent 30 Degrees	9.144mm (0.36")	0.4064mm (0.016")	1128-0003-P1
	3/64" 30 Degree Chisel	9.906mm (0.39")	1.1938mm (0.047")	1128-0008-P1
	13/64" Extra Large Chisel	7.62mm (0.3")	5.1562mm (0.203")	1128-0010-P1
	1/32" 30 Degree Chisel	9.017mm (0.355")	0.8128mm (0.032")	1128-0012-P1
	3/32" 30 Degree Chisel	9.017mm (0.355")	2.3876mm (0.094")	1128-0013-P1
	1/16" 30 Degree Chisel	9.017mm (0.355")	1.5748mm (0.062")	1128-0019-P1
	MiniWave®	8.255mm (0.325")	2.794mm (0.11")	1128-0032-P1
	0.25" Knife Blade	12.446mm (0.49")	6.35mm (0.25")	1128-0037-P1
	1/8" 30 Degree Chisel	9mm (0.355")	3.2mm (0.125")	1128-0051-P1

TD-100 Standard Soldering Tips

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/32" Conical Sharp Extended	13.4mm (0.530")	0.80mm (0.031")	1124-0001-P1
	1/64" Conical Sharp	7.8mm (0.310")	0.40mm (0.016")	1124-0002-P1
	1/64" Conical Sharp Bent 30 Degrees	7.8mm (0.310")	0.40mm (0.016")	1124-0003-P1
	1/64" Conical Sharp Extended	13.5mm (0.535")	0.40mm (0.016")	1124-0004-P1
	13/64" Conical Sharp Extended	4.7mm (0.188")	0.80mm (0.031")	1124-0005-P1
	3/128" Conical	4.6mm (0.184")	0.58mm (0.023")	1124-0006-P1
	1/16" 90 Degree Chisel	10.9mm (0.430")	2.03mm (0.080")	1124-0007-P1
	3/64" 30 Degree Chisel	9.7mm (0.380")	1.20mm (0.047")	1124-0008-P1
	3/64" 30 Degree Bevel	3.6mm (0.140")	1.20mm (0.047")	1124-0009-P1
	13/64" Extra Large Chisel	7.62mm (0.300")	5.15mm (0.203")	1124-0010-P1
	1/64" 60 Degree Bevel	14.7mm (0.580")	0.40mm (0.016")	1124-0011-P1
	1/32" 30 Degree Chisel	9.1mm (0.360")	0.80mm (0.031")	1124-0012-P1
	3/32" 30 Degree Chisel	9.9mm (0.390")	2.40mm (0.094")	1124-0013-P1
	5/64" 60 Degree Chisel	4.7mm (0.185")	2.00mm (0.078")	1124-0014-P1
	1/64" Conical, Sharp, Bent 30 Degrees, Extended	15.1mm (0.595")	0.40mm (0.016")	1124-0015-P1
	3/64" Chisel Bent 30 Degrees	11.7mm (0.460")	1.20mm (0.047")	1124-0016-P1
	1/16" 60 Degree Chisel	15.8mm (0.620")	1.60mm (0.063")	1124-0017-P1
	1/32" Conical Sharp Extended	16.7mm (0.660")	0.80mm (0.031")	1124-0018-P1
	1/16" 30 Degree Chisel	9.9mm (0.390")	1.60mm (0.063")	1124-0019-P1
	1/8" 90 Degree Chisel	4.8mm (0.190")	3.20mm (0.125")	1124-0020-P1
	3/128" Conical Sharp Bent 30 Degrees	14.4mm (0.570")	0.58mm (0.023")	1124-0021-P1
	1/16" Conical Sharp	9.9mm (0.390")	1.60mm (0.063")	1124-0022-P1

TD-100 Standard Soldering Tips

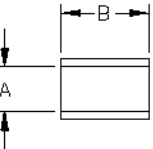
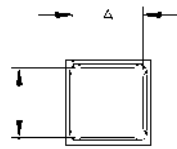
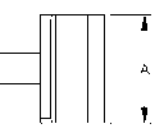
TD-100 Soldering Tips

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/8" 90 Degree Chisel Extended	8.6mm (0.340")	3.20mm (0.125")	1124-0023-P1
	1/16" 30 Degree Bevel	9.9mm (0.390")	1.60mm (0.063")	1124-0024-P1
	1/16" Conical Sharp Extended	12.1mm (0.478")	1.60mm (0.063")	1124-0025-P1
	1/16" Chisel Bent 30 Degrees	9.7mm (0.385")	1.60mm (0.063")	1124-0026-P1
	3/128" Conical Sharp	15.2mm (0.600")	0.58mm (0.023")	1124-0027-P1
	3/64" Chisel, Bent 30 Degrees, Extended	15.2mm (0.600")	0.91mm (0.36")	1124-0028-P1
	1/32" 30 Degree Bevel	9.1mm (0.360")	1.91mm (0.75")	1124-0029-P1
	1/32" Conical Sharp	9.9mm (0.390")	0.80mm (0.031")	1124-0030-P1
	Heat Staking	N/A	4.04mm (0.159")	1124-0031-P1
	MiniWave	N/A	3.05mm (.120")	1124-0032-P1
	Angled MiniWave	N/A	3.05mm (.120")	1124-0033-P1
	Single Sided Chisel	N/A	3.05mm (.120")	1124-0034-P1
	Angled MiniWave	N/A	2.11mm (.083")	1124-0035-P1
	1/128" Conical	N/A	0.20mm (0.008")	1124-0036-P1
	1/4 Flat Blade	N/A	4.57mm (0.180")	1124-0037-P1
	Single Sided Chisel, Fine Pitch	N/A	1.5mm (.06")	1124-0038-P1
	Angled MiniWave, Fine Pitch	N/A	1.6mm (.064")	1124-0039-P1
	MicroFine Single Sided Chisel	N/A	0.9mm (.035")	1124-0040-P1
	MicroFine Single Sided Chisel	N/A	1.1mm (.045")	1124-0041-P1
	MicroFine Conical	N/A	0.25mm (.01")	1124-0042-P1
	MicroFine Bent Conical	N/A	0.76mm (.03")	1124-0043-P1
	MicroFine Bent Conical	N/A	0.5mm (.02")	1124-0044-P1
	Angled Micro-Wave	N/A	1.1mm (.045")	1124-0045-P1
	Micro-Wave	N/A	1.1mm (.045")	1124-0046-P1
	Angled Chisel	8.4mm (0.33")	1.33mm (0.051")	1124-0047-P1
	Single Sided Chisel	17.00mm (0.693")	4.55mm (0.178")	1124-0048-P1
	1/16" Chisel Tip with K type Thermo-couple welded to tip			7021-0008-P1

TD-100 Surface Mount Removal Tips

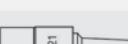
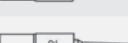
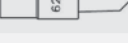
Tip Specifications

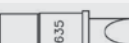
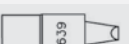
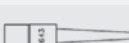
Tip	Description	Tip Size - L	Tip Size - D	Part Number
	Chip 402 Angle	2.2mm (.085")		1124-0518-P1
	Chip 1808	5mm (.195")		1124-0520-P1
	Chip 402	1mm (.04")		1124-0521-P1
	SOT 23	1.8mm (.07")		1124-0522-P1
	SOT 89	2.8mm (.11")		1124-0523-P1
	Chip 1206	3.6mm (.142")		1124-0524-P1
	Chip 0805	2.4mm (.095")		1124-0525-P1
	Chip 0201	1.22mm (.048")		1124-0533-P1
	Chip 0201	1.22mm (.048")		1124-0534-P1

Tip	Description	Dimension A	Dimension B	Part Number
	SOIC 14/16	5.2mm (.205")	10.5mm (.415")	1124-0504-P1
	SOIC 20	9.6mm (.377")	13.6mm (.535")	1124-0505-P1
	SOP 28	10.8mm (.426")	18.6mm (.734")	1124-0506-P1
	SOP 40	11.9mm (.467")	25.7mm (1.01")	1124-0507-P1
	SOP 44	13.1mm (.516")	28.4mm (1.12")	1124-0508-P1
	TSOP 56	18.8mm (.739")	14.1mm (.557")	1124-0509-P1
	TSOP 28	12mm (.471")	8.5mm (.333")	1124-0510-P1
	SOIC 8	5.1mm (.202")	4.65mm (.183")	1124-0519-P1
	TSOP 40	18.8mm (.74")	10.4mm (.410")	1124-0526-P1
	PLCC 28 Socket	9.3mm (.365")	9.3mm (.365")	1124-0511-P1
	PLCC 32	14.2mm (.561")	11.7mm (.459")	1124-0512-P1
	PLCC 44	16.8mm (.662")	16.8mm (.662")	1124-0513-P1
	QFP 144	20.6mm (.81")	20.6mm (.810")	1124-0514-P1
	PLCC 28	11.8mm (.465")	11.8mm (.465")	1124-0515-P1
	QFP 100/128	22mm (.865")	16mm (.628")	1124-0516-P1
	PLCC 18	7.6mm (.3")	12.8mm (.505")	1124-0528-P1
	TQFP 80	12.5mm (.491")	12.5mm (.491")	1124-0529-P1
	PLCC 52	19.4mm (.762")	19.4mm (.762")	1124-0530-P1
	Blade	10.8mm (.425")		1124-0501-P1
	Blade	16mm (.630")		1124-0502-P1
	Blade	21.2mm (.835")		1124-0503-P1
	Blade	25mm (.984")		1124-0532-P1
	Blade	6.7mm (.263")		1124-0536-P1

TD-100 Diamond Series Extended Life Soldering Tips

Tip Specifications

Profile	Description	Part Number
	.016 Conical	1126-0601-P1
	.039 Conical	1126-0602-P1
	.055 Conical, Blunt	1126-0603-P1
	.031 Conical, Blunt	1126-0604-P1
	.016 Conical, Long	1126-0605-P1
	.016 Conical	1126-0606-P1
	.016 Conical, Extended	1126-0607-P1
	.024 Conical	1126-0608-P1
	.039 Conical	1126-0609-P1
	.031 Conical	1126-0610-P1
	.047 Conical	1126-0611-P1
	.016 Conical Bent	1126-0612-P1
	.016 Conical, Blunt, Bent	1126-0613-P1
	.016 Conical, Blunt	1126-0614-P1
	.016 Conical Extended, Bent	1126-0615-P1
	.157 Bevel, 45 Degree	1126-0616-P1
	.078 Bevel, 60 Degree	1126-0617-P1
	.118 Bevel, 60 Degree	1126-0618-P1
	.157 Bevel, 45 Degree, Tinned on edge / face	1126-0619-P1
	.039 Bevel, 60 Degree, Extended	1126-0620-P1
	.039 Bevel, 45 Degree, Tinned on edge / face	1126-0621-P1
	.078 Bevel, 45 Degree, Tinned on edge / face	1126-0622-P1
	.118 Bevel, 45 Degree, Tinned on edge / face	1126-0623-P1
	.039 Bevel, 45 Degree	1126-0624-P1

Profile	Description	Part Number
	.06 Wide, Bevel 60 Degrees, .12x.06 Oval Face	1126-0625-P1
	.07 Bevel, 60 Degree	1126-0626-P1
	.078 Bevel, 45 Degree	1126-0627-P1
	.13 Bevel, 60 Degree	1126-0628-P1
	.118 Bevel, 45 Degree	1126-0629-P1
	.023 Bevel, Special	1126-0630-P1
	.031 Chisel Standard	1126-0631-P1
	.047 Chisel Standard	1126-0632-P1
	.062 Chisel Standard	1126-0633-P1
	.094 Chisel Standard	1126-0634-P1
	.157 Chisel Standard	1126-0635-P1
	.205 Chisel Standard	1126-0636-P1
	.157 Chisel Long Reach	1126-0637-P1
	.205 Chisel Long Reach	1126-0638-P1
	.078 Chisel Blunt	1126-0639-P1
	.125 Chisel Blunt	1126-0640-P1
	.055 Chisel, Bent 30 Degrees	1126-0641-P1
	.062 Chisel, Bent 30 Degrees	1126-0642-P1
	.055 Chisel, Bent, Extended	1126-0643-P1
	.185 Knife, 45 Degree	1126-0644-P1
	.181 Knife, 45 Degree	1126-0645-P1
	.185 Knife, 45 Degree, Blunt	1126-0646-P1
	.118 Knife, 45 Degree	1126-0647-P1
	Single Sided Chisel .08 Wide	1126-0648-P1

*Drawings are representative of tips actual shape. Actual tips may differ somewhat, other than front end geometry.

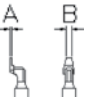
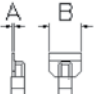
MT-100 & TP-100 Handpiece & Tips



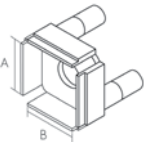
MT-100 / TP-100

Description	Part Number
MT-100 HeatWise/TempWise Handpiece	6010-0140-P1
MT-100 HeatWise/TempWiseTip & Tool Stand Kit (Includes MT-100 and Stand)	6993-0243-P1
MT-100 Handpiece IntelliHeat	6010-0148-P1
MT-100 Handpiece Kit IntelliHeat	6993-0264-P1
TP-100 Handpiece IntelliHeat	6010-0158-P1
TP-100 Handpiece Kit IntelliHeat	6993-0280-P1
Cleaning Sponge, Tip & Tool Stands (SX, PS, SP)	4021-0008-P3
MT-100 & TP-100 Tip & Tool Stand	6019-0080-P1
Soft Grip	1119-0165-P2
Replacement Green Comfort Grips for MT-100, pack of 5	1119-0177-P2

MT-100 Surface Mount Removal Tips

Tip	Component Type	Dimension A	Dimension B	Part Number
 (fig.A)	Chip (fig.A)	0.2mm (.008")	0.2mm (.008")	1124-1001-P1
	Chip, SOT (fig.B)	0.7mm (.03")	0.5mm (.02")	1124-1002-P1
	Chip, SOT (fig.B)	0.7mm (.03")	1mm (.04")	1124-1003-P1
 (fig.B)	Chip, SOT (fig.B)	0.7mm (.03")	2mm (.08")	1124-1004-P1
	SOIC, SOT, TSOPS (fig.C)	0.7 mm (.03")	6mm (.24")	1124-1005-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	8mm (.31")	1124-1006-P1
 (fig.C)	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	10mm (.39")	1124-1007-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	13mm (.51")	1124-1008-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	18mm (.74")	1124-1009-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (.03")	28mm (1.09")	1124-1010-P1
	Extended Chip, SOT (fig.B)	0.7mm (.03")	1mm (.04")	1124-1011-P1

TP-100 Surface Mount Removal Tips

Tip	Type	Lead Count	Size A	Size B	Height	Footprint	Part Number
 A B	LQFP / TQFP	80	12mm (.472")	12mm (.472")	1.4mm	2.0mm	1124-2001-P1
	LQFP / TQFP	64, 80, 100, 120, 128, 168	14mm (.551")	14mm (.551")	1.4mm	2.0mm	1124-2002-P1
	LQFP / TQFP	128, 144, 160, 176	20mm (.788")	20mm (.788")	1.4mm	2.0mm	1124-2003-P1
	LQFP / TQFP	176, 216	24mm (.945")	24mm (.945")	1.4mm	2.0mm	1124-2004-P1
	LQFP / TQFP	208, 256	28mm (1.10")	28mm (1.10")	1.4mm	2.0mm	1124-2005-P1
	QFP	52, 64, 80, 100	14mm (.551")	14mm (.551")	2.7mm	3.2mm	1124-2006-P1
	QFP	52, 64, 80, 100	14mm (.551")	14mm (.551")	2.7mm	3.9mm	1124-2007-P1
	QFP	64, 80, 100, 128	14mm (.551")	20mm (.788")	2.7mm	3.2mm	1124-2008-P1
	QFP	64, 80, 100, 128	14mm (.551")	20mm (.788")	2.7mm	3.9mm	1124-2009-P1
	QFP	120, 128, 144, 160, 208	28mm (1.10")	28mm (1.10")	3.4mm	2.6/3.2mm	1124-2010-P1
	QFP	160	28mm (1.10")	28mm (1.10")	3.4mm	3.9mm	1124-2011-P1

SMR Pulse Heat Handpieces

Optional Items and Replacement Parts



LF-15 LapFlo Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Part Number
	TLF-15 LapFlo Pulse Heat Handpiece (Static Dissipative)	7013-0004-02-P1
	LF-1 Single Point SMD Soldering Tip	6000-0008-P1
	ThermoPart Coating Removal Tip	6000-0009-P1
	LF-2 Multip Point SMD Soldering Tip	1121-0298-P1
	LF-3 Multip Point SMD Soldering Tip	1121-0299-P1
	LF-4 Multip Point SMD Soldering Tip	1121-0300-P1
	Universal Power Cord	7000-0023-P1

CT-15 ConducTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Part Number
	CT-15 ConducTweez Pulse Heat Handpiece (Static Dissipative)	7020-0001-P1
	Guide Block Kit	6993-0105-P1
	CT-1 Chip Component Tip	1121-0286-P1
	CT-2 14, 16 Lead SOIC Tip	1121-0271-P1
	CT-3 20 Lead SOIC Tip	1121-0270-P1
	CT-4 24, 28 Lead SOIC Tip	1121-0293-P1
	CT-5 SOT Tip	1121-0269-P1
	CT-6 Rounded End Auxiliary Heating Tip	1121-0004-P2
	Universal Power Cord	7000-0023-P1
	Tip Mounting Screw	1405-0182-P5

TW-15 ResisTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Part Number
	TW-15 ResisTweez Pulse Heat Handpiece (Static Dissipative)	7009-0005-P1
	Guide Block Kit	6993-0105-P1
	RT 1 18 Pin PLCC ThermoBond Tip	1121-0294-P1
	RT 2 20 Pin PLCC ThermoBond Tip	1121-0295-P1
	RT 3 28 Pin PLCC ThermoBond Tip	1121-0296-P1
	RT 4 44 Pin PLCC ThermoBond Tip	1121-0297-P1
	RT 5 Tapered Flat End Resistance Tips	1121-0301-P1
	RT 7 Flat End Resistance Tips	1121-0006-P1
	Universal Power Cord	7000-0023-P1
	Tip Mounting Screw	1405-0182-P5

TS-15 StripTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Part Number
	TS-15 StripTweez Pulse Heat Handpiece (Static Dissipative)	7012-0002-P1
	Thermal Stripper Tips	1121-0003-P1
	24 Gauge through 18 Gauge Tips	1121-0960-P1
	18 Gauge Tip	1121-0961-P1
	20 Gauge Tip	1121-0962-P1
	22 Gauge Tip	1121-0963-P1
	24 Gauge Tip	1121-0964-P1
	Universal Power Cord	7000-0023-P1
	Guide Block Kit	6993-0105-P1
	Tip Mounting Screw	1405-0106-P5

Handpieces



MicroChine Miniature Machining Handpiece/Replacement Parts

Description	Part Number
MC-65 MicroChine Handpiece	7026-0001-P1
Deluxe Tool Kit (optional)	6005-0013-P1
Probe Brake Patch Cord (PRC 2000 Systems Only)	1332-0159
Collet Nut	4005-0012
Collet 2.39mm (0.094") Diameter - Standard Collet	4005-0014

MicroChine Miniature Machining Handpiece/Replacement Parts

Tip	Item	Description	Part Number
	2	Mandrel with Screw Top	1115-0001-P10
	4	Drill, 0.79mm (1/32")	1112-0031-P10
	4	Drill, 1.19mm (3/64")	1112-0032-P10
	4	Drill, 1.59mm (1/16")	1112-0033-P10
	4	Drill, 1.98mm (5/64")	1112-0034-P10
	4	Drill, 2.39mm (3/32")	1112-0035-P10
	5	Ball Mill, 0.40mm (1/64")	1112-0001-P10
	5	Ball Mill, 0.78mm (0.03")	1112-0010-P10
	5	Ball Mill, 0.79mm (1/32")	1112-0002-P10
	5	Ball Mill, 1.19mm (3/64")	1112-0003-P10
	5	Ball Mill, 1.59mm (1/16")	1112-0004-P10
	5	Ball Mill, 2.38mm (3/32")	1112-0005-P10
	5	Ball Mill, 3.18mm (1/8")	1112-0006-P10
	5	Ball Mill, 3.97mm (5/32")	1112-0007-P10
	5	Ball Mill, 4.75mm (3/16")	1112-0008-P10
	5	Ball Mill, 6.35mm (1/4")	1112-0009-P10
	6	Saw, 2.38mm (3/32"), Mounted	1112-0061-P10
	8	Abrasive Wheel 7/8, RED	1129-0001-P10



Pik-Vac Handpiece & Replacement Parts

Description	Part Number
PV-65 Pik-Vac Vacuum Wand u/c	7027-0001-P1
HP-65 HandiPik (self-contained component handling wand)	7028-0001-P1
Kit (1 Small Vacuum Cup, 1 Medium Vacuum Cup, 1 Large Vacuum Cup and 3 Vacuum Needles)	6993-0154-P1

Support Products

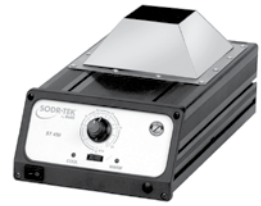
PM 200 Process Monitor

	Description	Part Number
	PM 200 Process Monitor (Dual Voltage)	8007-0464-P1
	Replacement Sensor pack of 10	1285-0046-P1

Tip Temperature Monitor

	Description	Part Number
	Tip Temperature Monitor (switches from °C to °F)	8001-0087-P1
	Replacement Sensor pack of 10	1285-0046-P1

Pre-heaters



ST 400 and ST 450 Replacement Parts

Description	Part Number
Power Cord, 115V	1332-0094-P1
Power Cord, 230V	1332-0093-P1
Fuse, 7 Amp, 125V, Time Lag	1159-0274-P5
Fuse, 3.15 Amp, 250V, Time Lag	1159-0221-P5
Fuse, 1.25 Amp, 250V, Time Lag	1159-0251-P5
Fuse, 0.63 Amp, 250V, Time Lag	1159-0252-P5
PCB ST 400 / 400E	6020-0193-P1
PCB ST 450 / 450E	6020-0198-P1
ST 400 Replacement Heater (Domestic)	3018-0128-P1
ST 400 Replacement Heater (Export)	3018-0129-P1
ST 450 Replacement Heater (Domestic)	6000-0291-P1
ST 450 Replacement Heater (Export)	6000-0292-P1
ST 450 Focus Nozzle 1.5" Square	4058-0001-P1
ST 450 Focus Nozzle 3.0" Square	4058-0002-P1
ST 450 Focus Nozzle 4.5" Square	4058-0003-P1
ST 450E Heater Kit Upgrade	6993-0301-P1



ST 1600 Replacement Parts

Item	Description	Voltage	Part Number
Bottom Heater	ASSY, Heater Box, ST-1600	120V	6000-0422-P1
	ASSY, Heater Box, ST-1600	230V	6000-0423-P1
Printed Circuit Boards	PCB, Control, ST1600		6020-0222-P1
Chassis Fan Assembly	Fan, 60HZ 10 WATTS	115V	6000-0216-P1
	Fan, 60HZ 12 WATTS	230V	6000-0217-P1
Low Voltage Fuse	Fuse, .5 AMP S.B.		1159-0248-P5
	Fuse, 0.5A, Time Lag, IEC, P5		1159-0213-P5
Main Chassis Fuse	Fuse, 15A, Slow-Blow, IR1000, DOM	250V	1159-0279-P5
	Fuse, 7A, Time Lag, IR1000, EXP	250V	1159-0278-P5

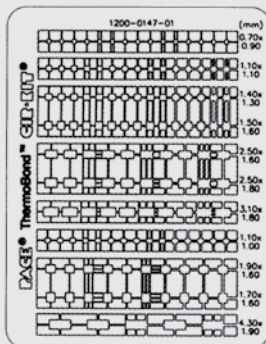
Support Products

ThermoBond Cir-Kits

Description	Part Number
ThermoBond Cir-Kit, Surface Mount Version	6993-0176
Complete Consisting of:	
ThermoBond Frames (solder plated on one side):	ThermoBond Cir-Kit Frames pictured on page 31
Chip Resistor/Capacitor	1200-0147-01-P1
Inductors, MELFs, Tantalum Capacitors	1200-0148-01-P1
SOTs	1200-0149-01-P1
SOICs, TSOPs	1200-0150-01-P1
PLCCs, LCCCs, SOJs, Ceramic QFPs, Basic Cir-Kit Material and Dry Film Adhesive for Custom Shaping/Cutting	1200-0151-01-P1
PQFPs	1200-0152-01-P1
Other Accessories:	
Abrasive Stick, 1 piece	1129-0014-P10
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0"), 10 pieces	1289-0016-01-P25
Provis Kit (for cutting and scraping)	7016-0003-P1
ThermoBond Tips	ThermoBond Tips Part Numbers on page 34
ThermoBond Cir-Kit, Thru-Hole Version	6993-0179
Complete Consisting of:	
ThermoBond Frames (solder plated on one side):	ThermoBond Cir-Kit Frames pictured on pages 32-33
Straight Run	1200-0158-01-P1
Fine Traces	1200-0159-01-P1
Variety Frame	1200-0160-01-P1
Track Pad	1200-0161-01-P1
DIP Pad	1200-0163-01-P1
Lap/Trace Frames (solder plated on both sides):	ThermoBond Cir-Kit Frames pictured on page 37
Straight Run	1200-0164-03-P1
Fine Traces	1200-0165-03-P1
Other Accessories:	
Eyelets and Funnelets	Eyelets and Funnelets Part Numbers on page 40
Abrasive Stick, 1 piece	1129-0014-P10
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0"), 10 pieces	1289-0016-01-P25
Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Lower Setting Tool, Funnelet	1132-0017-P1
Support Tool Base	1321-0054
Provis Kit (for cutting and scraping)	7016-0003-P1
ThermoBond Tips	ThermoBond Tips Part Numbers on page 34

Support Products

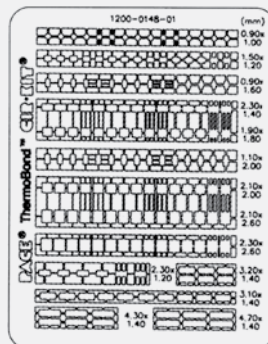
ThermoBond Cir-Kit Frames



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.7 x 0.9	.028 x .035
2	15	1.10 x 1.10	.043 x .043
3	15	1.40 x 1.30	.055 x .051
4	15	1.50 x 1.60	.059 x .063
5	10	2.50 x 1.60	.098 x .063
6	10	2.50 x 1.80	.098 x .071
7	10	3.10 x 1.80	.122 x .071
8	15	1.10 x 1.00	.043 x .039
9	10	1.90 x 1.60	.075 x .063
10	10	1.70 x 1.60	.067 x .075
11	5	4.30 x 1.90	.169 x .075

1200-0147-01-P1

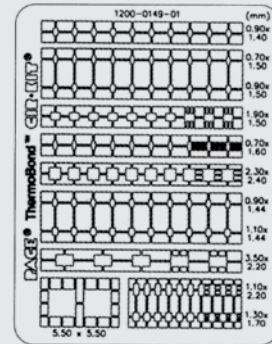
Chip Resistor / Capacitor



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.9 x 1.0	.035 x .039
2	15	1.50 x 1.20	.059 x .047
3	15	0.9 x 1.60	.035 x .063
4	15	2.30 x 1.40	.091 x .055
5	15	1.90 x 1.80	.075 x .071
6	15	1.10 x 2.00	.043 x .079
7	15	2.10 x 2.00	.083 x .079
8	15	2.10 x 2.60	.083 x .102
9	15	2.30 x 2.60	.091 x .102
10	6	2.30 x 1.20	.091 x .047
10	6	3.20 x 1.40	.126 x .055
11	10	3.10 x 1.40	.122 x .055
12	6	4.30 x 1.40	.169 x .055
12	6	4.70 x 1.40	.185 x .055

1200-0148-01-P1

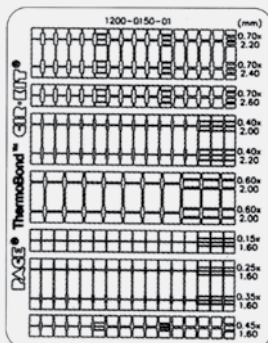
Inductors, MELFS, Tantalum Capacitors



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	10	0.9 x 1.40	.035 x .055
2	10	0.7 x 1.50	.028 x .059
3	10	0.9 x 1.50	.035 x .059
4	10	1.90 x 1.50	.075 x .059
5	10	0.7 x 1.60	.028 x .063
6	10	2.30 x 2.40	.091 x .094
7	10	0.9 x 1.44	.035 x .057
8	10	1.10 x 1.44	.043 x .057
9	5	3.50 x 2.20	.138 x .087
10	2	5.50 x 5.50	.217 x .217
11	10	1.10 x 2.20	.043 x .087
12	10	1.30 x 1.70	.051 x .067

1200-0149-01-P1

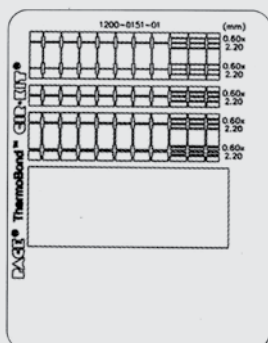
SOTs



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.7 x 2.20	.028 x .087
2	15	0.7 x 2.40	.028 x .094
3	15	0.7 x 2.60	.028 x .102
4	15	0.4 x 2.00	.016 x .079
5	15	0.4 x 2.20	.016 x .087
6	10	0.6 x 2.00	.027 x .079
7	10	0.6 x 2.00	.024 x .079
8	15	0.15 x 1.60	.006 x .063
9	15	0.25 x 1.60	.010 x .063
10	15	0.35 x 1.60	.014 x .063
11	15	0.45 x 1.60	.018 x .063

1200-0150-01-P1

SOICs, TSOPs

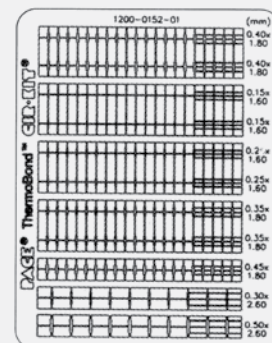


ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	10	0.6 x 2.20	.024 x .087
2	10	0.6 x 2.20	.024 x .087
3	10	0.6 x 2.20	.024 x .087
4	10	0.6 x 2.20	.024 x .087
5	10	0.6 x 2.20	.024 x .087
6	1	42.0 x 16.3	1.65 x .642
7	1	42.0 x 16.3	1.65 x .642

Row 6 is just adhesive only

1200-0151-01-P1

PLCCs, LCCCs, Ceramic QFPs



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	20	0.4 x 1.80	.016 x .071
2	20	0.4 x 1.80	.016 x .071
3	20	0.15 x 1.60	.006 x .063
4	20	0.15 x 1.60	.006 x .063
5	20	0.25 x 1.60	.010 x .063
6	20	0.25 x 1.60	.010 x .063
7	20	0.35 x 1.80	.014 x .071
8	20	0.35 x 1.80	.014 x .071
9	20	0.45 x 1.80	.018 x .071
10	10	0.30 x 2.60	.012 x .102
11	10	0.50 x 2.60	.020 x .102

1200-0152-01-P1

PQFPs

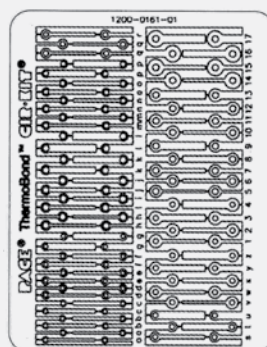
Support Products

ThermoBond Cir-Kit Frames



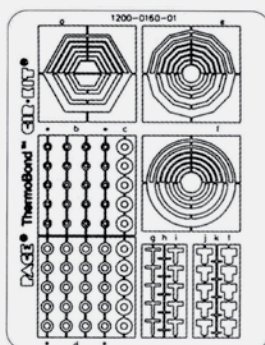
ROW	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH $\pm$.001 (IN)
1	5	0.64	0.025
2	5	0.79	0.031
3	5	1.04	0.041
4	5	1.3	0.051
5	3	1.57	0.062
6	3	1.91	0.075
7	3	2.36	0.093
8	3	2.54	0.1

1200-0158-01-P1
Straight Run



1200-0161-01-P1
Track Pad

SEC.	# OF TRACES & PADS	TRACE WIDTH $\pm$.001 (IN)	TRACE WIDTH (mm) NOM.	PAD SIZE LD. $\pm$.001 (IN)	PAD SIZE LD. (mm) NOM.	PAD SIZE OD. $\pm$.001 (IN)	PAD SIZE OD. (mm) NOM.
A	4	0.02	0.51	0.033	0.084	0.05	1.27
B	4	0.025	0.64	0.033	0.084	0.05	1.27
C	4	0.031	0.79	0.033	0.084	0.05	1.27
D	4	0.02	0.51	0.033	0.084	0.062	1.57
E	4	0.025	0.64	0.033	0.084	0.062	1.57
F	4	0.031	0.79	0.033	0.084	0.062	1.57
G	4	0.05	1.27	0.033	0.084	0.062	1.57
H	4	0.02	0.51	0.049	1.24	0.075	1.91
I	4	0.025	0.64	0.049	1.24	0.075	1.91
J	4	0.031	0.79	0.049	1.24	0.075	1.91
K	4	0.05	1.27	0.049	1.24	0.075	1.91
L	4	0.062	1.57	0.049	1.24	0.075	1.91
M	4	0.02	0.51	0.04	1.02	0.062	1.57
N	4	0.025	0.64	0.04	1.02	0.062	1.57
O	4	0.031	0.79	0.04	1.02	0.062	1.57
P	4	0.05	1.27	0.04	1.02	0.062	1.57
Q	4	0.02	0.51	0.04	1.02	0.075	1.91
R	2	0.025	0.64	0.04	1.02	0.075	1.91
S	2	0.031	0.79	0.04	1.02	0.075	1.91
T	2	0.05	1.27	0.04	1.02	0.075	1.91
U	2	0.062	1.57	0.04	1.02	0.075	1.91
V	2	0.02	0.51	0.04	1.02	0.093	2.36
W	2	0.025	0.64	0.04	1.02	0.093	2.36
X	2	0.031	0.79	0.04	1.02	0.093	2.36
Y	2	0.05	1.27	0.04	1.02	0.093	2.36
Z	2	0.062	1.57	0.04	1.02	0.093	2.36
1	2	0.025	0.64	0.04	1.02	0.1	2.54
2	2	0.031	0.79	0.04	1.02	0.1	2.54
3	2	0.05	1.27	0.04	1.02	0.1	2.54
4	2	0.062	1.57	0.04	1.02	0.1	2.54
5	2	0.02	0.51	0.049	1.24	0.062	1.57
6	2	0.025	0.64	0.049	1.24	0.093	2.36
7	2	0.031	0.79	0.049	1.24	0.093	2.36
8	2	0.05	1.27	0.049	1.24	0.093	2.36
9	2	0.062	1.57	0.049	1.24	0.093	2.36
10	2	0.025	0.64	0.049	1.24	0.1	2.54
11	2	0.031	0.79	0.049	1.24	0.1	2.54
12	2	0.05	1.27	0.049	1.24	0.1	2.54
13	2	0.062	1.57	0.049	1.24	0.1	2.54
14	2	0.025	0.64	0.049	1.24	0.125	3.18
15	2	0.031	0.79	0.049	1.24	0.125	3.18
16	2	0.05	1.27	0.049	1.24	0.125	3.18
17	2	0.062	1.57	0.049	1.24	0.125	3.18



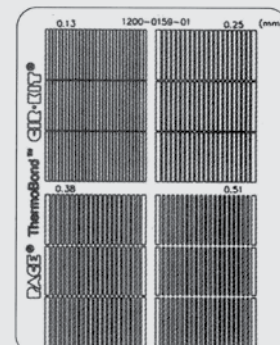
SEC.	# OF TRACES	TRACE WIDTH $\pm$.001 (IN)	TRACE WIDTH (mm) NOM.
F	2	0.005	0.13
	3	0.01	0.25
	2	0.02	0.51
	2	0.031	0.79
	1	0.05	0.127
	1	0.062	0.158

1200-0160-01-P1
Variety Frame

SEC.	# OF TRACES	TRACE WIDTH $\pm$.001 (IN)	TRACE WIDTH (mm) NOM.
A	3	0.005	0.13
	2	0.01	0.25
	1	0.02	0.51
	1	0.031	0.79
	1	0.05	0.127
	1	0.062	0.158
	2	0.005	0.13
	3	0.01	0.25
E	2	0.02	0.51
	2	0.031	0.79
	1	0.05	0.127
	1	0.062	0.158

SEC.	# OF TRACES	TRACE WIDTH $\pm$.001 (IN)	TRACE WIDTH (mm) NOM.
G	5	0.02	0.51
H	5	0.01	0.25
I	5	0.031	0.79
J	5	0.05	1.27
K	5	0.01	0.25
L	5	0.062	1.58

SEC.	# OF TRACES	ID $\pm$.001 (IN)	ID (mm) NOM.	OD $\pm$.001 (IN)	OD (mm) NOM.
B	20	0.031	0.79	0.062	0.158
C	20	0.051	0.13	0.125	3.18
D	10	0.051	0.13	0.093	2.36

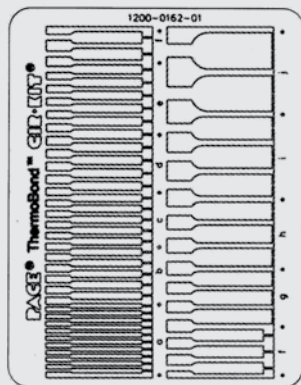


SEC.	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH $\pm$.001 (IN)
1	29	0.127	0.005
2	20	0.381	0.015
3	20	0.254	0.01
4	20	0.508	0.02

1200-0159-01-P1
Fine Traces

Support Products

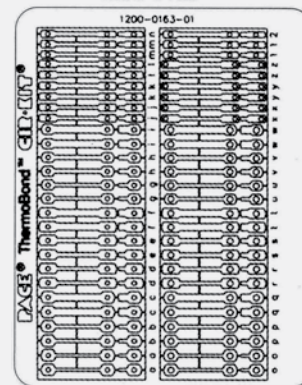
ThermoBond Cir-Kit Frames



SEC.	# OF PADS	WIDTH OF PAD ± .001(IN)	WIDTH OF PAD (mm) NOM.	WIDTH OF TRACK ± .001(IN)	WIDTH OF TRACK (mm) NOM.
A	10	0.031	0.79	0.02	0.51
B	5	0.051	1.3	0.025	0.64
C	5	0.051	1.3	0.031	0.79
D	5	0.062	1.57	0.031	0.79
E	5	0.062	1.57	0.041	1.04
F	5	0.08	2.03	0.041	1.04
G	3	0.1	2.54	0.051	1.3
H	3	0.125	3.18	0.062	1.57
I	3	0.156	3.96	0.062	1.57
J	2	0.25	6.35	0.093	2.36

1200-0162-02-P1

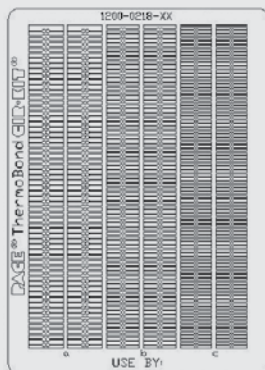
Edge Connector (Gold Plated)



SEC.	# OF PADS	TRACK WIDTH ± .001(IN)	TRACK WIDTH (mm) NOM.	PAD SIZE L.D. ± .001(IN)	PAD SIZE L.D. (mm) NOM.	PAD SIZE O.D. ± .001(IN)	PAD SIZE O.D. (mm) NOM.	PAD WIDTH ± .001(IN)	PAD WIDTH (mm) NOM.
A	6	0.02	0.51	0.031	0.79	0.1	0.254	0.08	2.03
B	6	0.025	0.64	0.031	0.79	0.1	0.254	0.08	2.03
C	6	0.05	1.27	0.031	0.79	0.1	0.254	0.08	2.03
D	6	0.025	0.64	0.031	0.79	0.125	3.18	0.07	1.78
E	6	0.031	0.79	0.031	0.79	0.125	3.18	0.07	1.78
F	6	0.05	1.27	0.031	0.79	0.125	3.18	0.07	1.78
G	6	0.025	0.64	0.031	0.79	0.09	2.29	0.07	1.78
H	6	0.031	0.79	0.031	0.79	0.09	2.29	0.07	1.78
I	6	0.05	1.27	0.031	0.79	0.09	2.29	0.07	1.78
J	6	0.025	0.64	0.031	0.79	0.125	3.18	0.05	1.27
K	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
L	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
M	6	0.025	0.64	0.031	0.79	0.125	3.18	0.041	1.04
N	3	0.031	0.79	0.031	0.79	0.125	3.18	0.041	1.04
O	6	0.02	0.51	0.041	1.04	0.1	2.54	0.08	2.03
P	6	0.025	0.64	0.041	1.04	0.1	2.54	0.08	2.03
Q	6	0.05	1.27	0.041	1.04	0.1	2.54	0.08	2.03
R	6	0.025	0.64	0.041	1.04	0.125	3.18	0.07	1.78
S	6	0.031	0.79	0.041	1.04	0.125	3.18	0.07	1.78
T	6	0.05	1.27	0.041	1.04	0.125	3.18	0.07	1.78
U	6	0.025	0.64	0.041	1.04	0.09	2.29	0.07	1.78
V	6	0.031	0.79	0.041	1.04	0.09	2.29	0.07	1.78
W	6	0.05	1.27	0.041	1.04	0.09	2.29	0.07	1.78
X	6	0.025	0.64	0.031	0.79	0.125	3.18	0.05	1.27
Y	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
Z	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
1	6	0.025	0.64	0.031	0.79	0.125	3.18	0.041	1.04
2	3	0.031	0.79	0.031	0.79	0.125	3.18	0.041	1.04

1200-0163-01-P1

Dip Pad



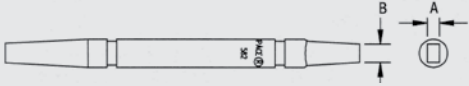
SEC.	PAD SIZE DIA ± .001(IN)	PAD SIZE DIA (mm) NOM.	WIDTH OF TRACK ± .001(IN)	WIDTH OF TRACK (mm) NOM.
A	0.03	0.76	0.008	0.2
B	0.023	0.58	0.008	0.2
C	0.017	0.43	0.008	0.2

1200-0218-01-P1

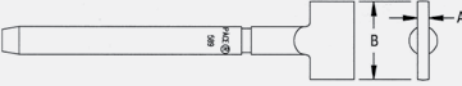
BGA Variety

ThermoBond Tips

Double Sided Tips

Tip	Description	Part Number
	3.2mm (0.125") Diameter & 2mm x 3mm (0.08" x 0.12") Rectangle (A x B)	1121-0582-P1

Single Sided Tips

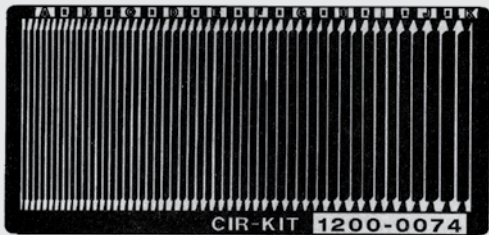
Tip	Description	Part Number
	0.79mm x 12.7mm (0.031" x 0.5") Rectangle (A x B)	1121-0586-P1
	1.9mm x 13.46mm (0.075" x 0.53") Rectangle (A x B)	1121-0589-P1

Support Products

Cir-Kit Replacement Parts

Description	Part Number
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool Base	1321-0054-P1
Edge Connector Clamp Assembly	6000-0130-P1
Bonding Kit	6999-0005
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0") 25 pieces	1289-0016-01-P25

Non-ThermoBond Cir-Kits Frames

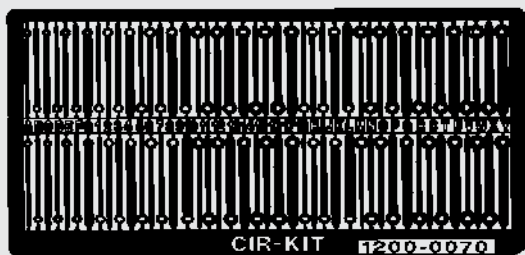


Straight Run Frame
1200-0074-P1

RUN TABULATION CHART		
RUN DESIGNATIONS	RUN WIDTH	# OF RUNS
A	0.015	9
B	0.02	6
C	0.025	6
D	0.031	6
E	0.041	6
F	0.051	6
G	0.062	6
H	0.075	4
J	0.093	3
K	0.1	4

Support Products

Non-ThermoBond Cir-Kits Frames



Track Pad Frame, (Selector Type)

1200-0070-P1

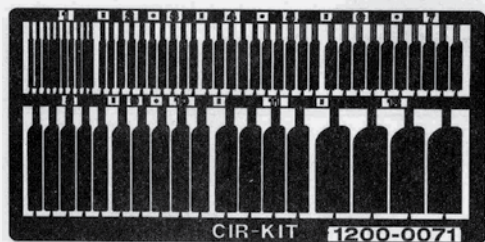
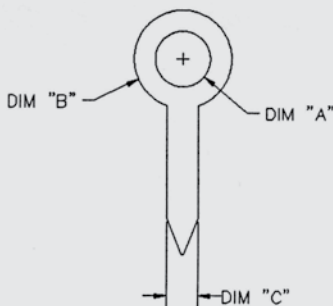
Track Pad Frame, choice of one size on the above frame

B, G, (letter size)

1200-0011_

An example would be 1200-0011B. This would be a frame containing pad B only.

PAD TABULATION CHART							
PAD DESIGNATION	"A"	"B"	"C"	PAD DESIGNATION	"A"	"B"	"C"
B	0.033	0.051	0.025	1	0.041	0.062	0.02
G	0.033	0.062	0.051	2	0.041	0.062	0.025
				3	0.041	0.062	0.031
				4	0.041	0.062	0.051
				5	0.041	0.075	0.02
				6	0.041	0.075	0.025
				7	0.041	0.075	0.031
				8	0.041	0.075	0.051
				9	0.041	0.075	0.062
				10	0.041	0.093	0.02
				11	0.041	0.093	0.025
				12	0.041	0.093	0.031
				13	0.041	0.093	0.051
				14	0.041	0.093	0.062
				15	0.041	0.1	0.025
				16	0.041	0.1	0.031
				17	0.041	0.1	0.051
				18	0.041	0.1	0.062



Edge Connector

Frame 1200-0071-P1

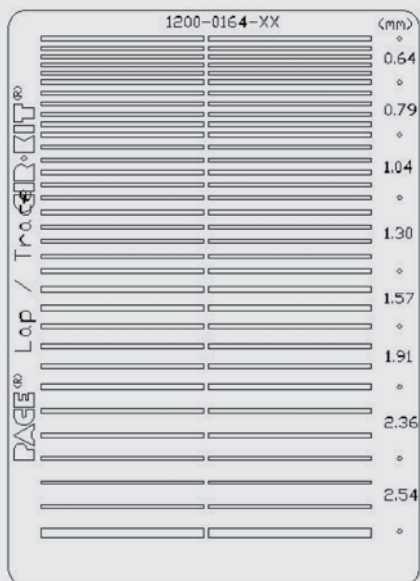
EDGE CONNECTOR TABULATION CHART			
CONNECTOR DESIGNATION	"A" WIDTH	"B" WIDTH	# OF CONNECTORS
1	0.031	0.02	10
2	0.051	0.025	5
3	0.051	0.031	5
4	0.062	0.031	5
5	0.062	0.041	5
6	0.08	0.041	5
7	0.08	0.041	5
8	0.1	0.051	5
9	0.125	0.051	2
10	0.125	0.062	3
11	0.156	0.062	4
12	0.25	0.093	4



*These Frames do not have a dry-film adhesive backing. NOTE: Dimensions are $\pm .003$ "

Support Products

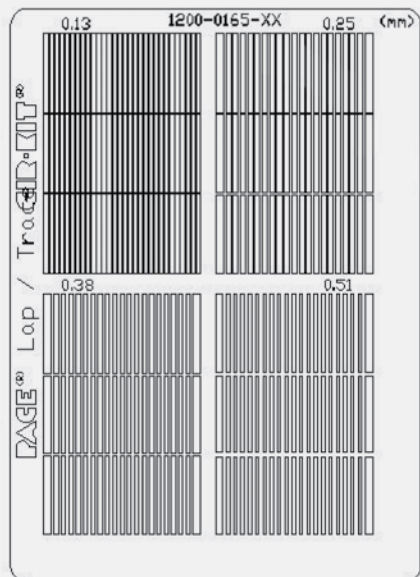
Non-ThermoBond Cir-Kits Frames



Lap / Trace (Straight)

1200-0164-03-P1

SEC.	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH $\pm$.001 (IN)
1	29	0.127	0.005
2	20	0.381	0.015
3	20	0.254	0.01
4	20	0.508	0.02



Lap / Trace (Fine)

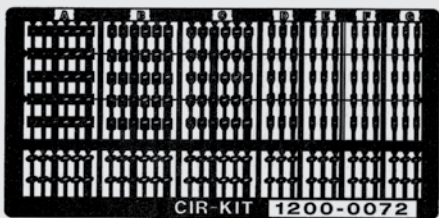
1200-0165-03-P1

ROW	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH $\pm$.001 (IN)
1	5	0.64	0.025
2	5	0.79	0.031
3	5	1.04	0.041
4	5	1.3	0.051
5	3	1.57	0.062
6	3	1.91	0.075
7	3	2.36	0.093
8	3	2.54	0.1

*These Frames do not have a dry-film adhesive backing.

Support Products

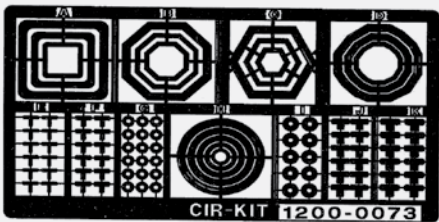
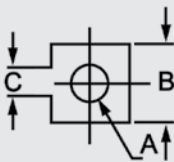
Non-ThermoBond Cir-Kits Frames



Dip Pad Frame

1200-0072-P1

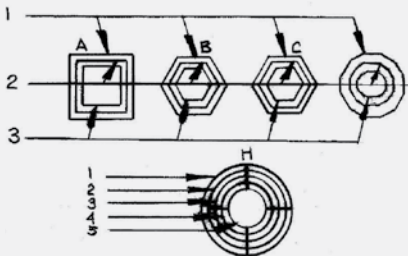
FRAME DESIGNATION	"A" WIDTH	"B" Width		"B" WIDTH
		RECT. PADS	ROUND PADS	
A1	0.031	0.08	0.07	0.02
A2	0.031	0.08	0.07	0.025
A3	0.031	0.08	0.07	0.05
A4	0.041	0.08	0.07	0.02
A5	0.041	0.08	0.07	0.025
A6	0.041	0.08	0.07	0.05
B1	0.031	0.07	0.07	0.025
B2	0.031	0.07	0.07	0.031
B3	0.031	0.07	0.07	0.05
B4	0.041	0.07	0.07	0.025
B5	0.041	0.07	0.07	0.031
B6	0.041	0.07	0.07	0.05
C1	0.031	0.07	0.07	0.025
C2	0.031	0.07	0.07	0.031
C3	0.031	0.07	0.07	0.05
C4	0.041	0.07	0.07	0.025
C5	0.041	0.07	0.07	0.031
C6	0.041	0.07	0.07	0.05
D1	0.041	0.05	0.062	0.025
D2	0.031	0.05	0.062	0.031
D3	0.031	0.05	0.062	0.031
E1	0.031	0.05	0.062	0.025
E2	0.031	0.05	0.062	0.031
E3	0.031	0.05	0.062	0.031
F1	0.031	0.05	0.062	0.02
F2	0.031	0.05	0.062	0.031
F3	0.031	0.05	0.062	0.031
G1	0.031	0.041	0.062	0.025
G2	0.031	0.041	0.062	0.031
G3	0.031	0.041	0.062	0.031



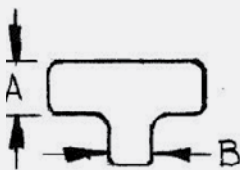
Dip Pad Frame

1200-0073-P1

FRAME DESIGNATION	Track Width				
	1	2	3	4	5
A	0.062	0.051	0.031		
B	0.062	0.051	0.031		
C	0.062	0.051	0.031		
D	0.062	0.051	0.031		
H	0.062	0.051	0.031	0.031	0.02



FRAME DESIGNATION	"A" WIDTH	"B" WIDTH	# OF T'S
E	0.02	0.02	12
F	0.061	0.031	12
K	0.051	0.051	12
L	0.062	0.062	12



FRAME DESIGNATION	"A" WIDTH	"B" WIDTH	# OF PADS
G	0.051	0.093	18
J	0.051	0.125	10



*These Frames do not have a dry-film adhesive backing.

Support Products

Non-ThermoBond Cir-Kits

Description	Part Number
Cir-Kit, Basic Version (A Selection for Mixed Technology Repairs)	6993-0037
Complete Consisting of:	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Other Accessories:	
Eyelets and Funnelets (qty of 100 each in kits)	1347-0013-P100
	1347-0016-P100
	1347-0007-P100
	1347-0009-P100
Setting Tool Assembly, Upper Setting Tool	6000-0051
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054
Cir-Kit, Advanced Version	6993-0077
Complete Consisting of:	
Cir-Kit Frames	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Dip Pad Frame	1200-0072-P1
Variety Frame (Angles, T's, Pads)	1200-0073-P1
Other Accessories:	
Eyelets and Funnelets (qty of 100 each in kits)	1347-0013-P100
	1347-0016-P100
	1347-0007-P100
	1347-0009-P100
	1347-0010-P100
	1347-0051-P100
	1347-0053-P100
Abrasive Stick	1129-0014-P1
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054

Support Products

Non-ThermoBond Cir-Kits and Stencils

Description	Part Number
Cir-Kit, Master Version	6993-0082
Complete Consisting of:	
Cir-Kit Frames	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Dip Pad Frame	1200-0072-P1
Variety Frame (Angles, T's, Pads)	1200-0073-P1
Edge Connector Frame	1200-0071-P1
Other Accessories:	
Eyelets and Funnelets (qty of 100 each in kits)	1347-0013-P100
	1347-0016-P100
	1347-0007-P100
	1347-0009-P100
	1347-0010-P100
	1347-0051-P100
	1347-0053-P100
Adhesive Kit	1239-0011-P1
Abrasive Stick	1129-0014-P10
Edge Connector Clamp Assembly	6000-0130-P1
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054

Support Products

Stenciling Kits - Requires Stencil Bracket Kit (Part Number 6993-0048-P1, See Page 50)

Optional Stencil	Part Number
Leaded Component Stencil	1001-0001-P1
Stencil, 1.67mm x 1.82, 8 I/O	1002-0008-P1
Stencil, 1.82mm x 2.17, 10 I/O	1002-0010-P1
Stencil, 3.25mm SQ, 8 I/O	1003-0008-P1
Stencil, 3mm SQ, 16 I/O	1003-0016-P1
Stencil, 4mm SQ, 16 I/O	1004-0016-P1
Stencil, 4mm SQ, 20 I/O	1004-0020-P1
Stencil, 4mm SQ, 24 I/O	1004-0024-P1
Stencil, 4mm SQ, 28 I/O	1004-0028-P1
Stencil, 4mm x 4, 24 I/O	1004-1024-P1
Stencil, 4mm SQ, 24 I/O	1004-2024-P1
Stencil, 4mm x 4, 24 I/O	1004-3024-P1
Stencil, 5mm x 4, 24 I/O	1005-0024-P1
Stencil, 5mm SQ, 32 I/O	1005-0032-P1
Stencil, 5mm x 5, 32 I/O	1005-2032-P1
Stencil, 6mm SQ, 28 I/O	1006-0028-P1
Stencil, 6mm SQ, 5 I/O	1006-0032-P1
Stencil, 6mm SQ, 40 I/O	1006-0040-P1
Stencil, 6mm x 8, 48 I/O	1006-0048-P1
Stencil, 5.5mm x 16, 114 I/O	1006-0114-P1
Stencil, 6mm x 8, 48 I/O	1006-2048-P1
Stencil, 7mm SQ, 44 I/O	1007-0044-P1
Stencil, 7mm SQ, 48 I/O	1007-0048-P1
Stencil, 7mm SQ, 49 I/O	1007-0049-P1
Stencil, 7mm SQ, 113 I/O	1007-0113-P1
Stencil, 7mm SQ, 44 I/O	1007-1044-P1
Stencil, 7mm SQ, 32 I/O	1007-2032-P1
Stencil, 7mm SQ, 44 I/O	1007-2044-P1
Stencil, 7mm x 7, 48 I/O	1007-2048-P1
Stencil, 8mm x 10, 48 I/O	1008-0048-P1
Stencil, 8mm SQ, 64 I/O	1008-0064-P1
Stencil, 9mm SQ, 44 I/O	1009-0044-P1
Stencil, 9mm SQ, 8-54 I/O	1009-0054-P1
Stencil, 9mm SQ, 56 I/O	1009-0056-P1
Stencil, 9mm SQ, 63 I/O	1009-0063-P1
Stencil, 9mm SQ, 64 I/O	1009-0064-P1
Stencil, 9mm SQ, 64QFN I/O	1009-2064-P1
Stencil, 10mm x 10	1010-0064-P1
Stencil, 26.7mm x 10.7, 120 I/O	1010-0120-P1
Stencil, 10mm SQ, 128 I/O	1010-0128-P1
Stencil, 10mm SQ, 151 I/O	1010-0151-P1
Stencil, 11.4mm x 5.1, 22 I/O	1011-0022-P1
Stencil, 6.4mm x 11, 28 I/O	1011-0028-P1
Stencil, 9mm x 11, 56 I/O	1011-0056-P1
Stencil, 11mm x 8, 69 I/O	1011-0069-P1
Stencil, 11mm SQ, 72 I/O	1011-0072-P1
Stencil, 11mm x 8, 88 I/O	1011-0088-P1
Stencil, 11mm SQ, 100 I/O	1011-0100-P1
Stencil, 11mm SQ, 100 I/O	1011-2100-P1

Optional Stencil	Part Number
Stencil, PLCC 28	1012-0028-P1
Stencil, 12mm x 8, 60 I/O	1012-0060-P1
Stencil, 12mm x 18, 64 I/O	1012-0064-P1
Stencil, 12mm x 18, 80 I/O	1012-0080-P1
Stencil, 12mm SQ, 144 I/O	1012-0144-P1
Stencil, 12mm SQ, 160 I/O	1012-0160-P1
Stencil, 12mm SQ, 169 I/O	1012-0169-P1
Stencil, 12mm SQ, 179 I/O	1012-0179-P1
Stencil, 12mm FBGA, 144 I/O	1012-2144-P1
Stencil, 12mm SQ, 179 I/O	1012-2179-P1
Stencil, 13x10mm, 64 I/O	1013-0064-P1
Stencil, 13mm SQ, 144 I/O	1013-0144-P1
Stencil, 14mm x 8, 54 I/O	1014-0054-P1
Stencil, 14mm x 8, 63 I/O	1014-0063-P1
Stencil, 14mm x 22, 119 I/O	1014-0119-P1
Stencil, 15mm SQ, 148 I/O	1015-0148-P1
Stencil, 15mm SQ, 156 I/O	1015-0156-P1
Stencil, 15mm SQ, 160 I/O	1015-0160-P1
Stencil, 15mm x 13, 165 I/O	1015-0165-P1
Stencil, 15mm SQ, 176 I/O	1015-0176-P1
Stencil, 15mm SQ, 196 I/O	1015-0196-P1
Stencil, 15mm SQ, 216 I/O	1015-0216-P1
Stencil 16mm x 8, 60 I/O	1016-0060-P1
Stencil, 16mm SQ, 209 I/O	1016-0209-P1
Stencil, 17mm SQ, 208 I/O	1017-0208-P1
Stencil, 17mm SQ, 225 I/O	1017-0225-P1
Stencil, 17mm SQ, 256 I/O	1017-0256-P1
Stencil, 19mm SQ, 52 I/O	1019-0052-P1
Stencil, 19mm SQ, 163 I/O	1019-0163-P1
Stencil, 19mm SQ, 225 I/O	1019-0225-P1
Stencil, 19mm SQ, 276 I/O	1019-0276-P1
Stencil, 19mm SQ, 289 I/O	1019-0289-P1
Stencil, 21mm SQ, 156 I/O	1021-0156-P1
Stencil, 21mm SQ, 255 I/O	1021-0255-P1
Stencil, 21mm SQ, 292 I/O	1021-0292-P1
Stencil, 20.95mm x 24.7, 24 I/O	1021-0303-P1
Stencil, 23mm SQ, 169 I/O	1023-0169-P1
Stencil, 23mm SQ, 192 I/O	1023-0192-P1
Stencil, 23mm SQ, 208 I/O	1023-0208-P1
Stencil, 23mm SQ, 241 I/O	1023-0241-P1
Stencil, 23mm SQ, 256 I/O	1023-0256-P1
Stencil, 23mm SQ, 288 I/O	1023-0288-P1
Stencil, 23mm SQ, 324 I/O	1023-0324-P1
Stencil, 23mm SQ, 360 I/O	1023-0360-P1
Stencil, 23mm SQ, 440 I/O	1023-0440-P1
Stencil, 23mm SQ, 484 I/O	1023-0484-P1
Stencil, 24mm SQ, 241 I/O	1024-0241-P1
Stencil, 25mm SQ, 357 I/O	1025-0357-P1
Stencil, 25mm SQ, 360 I/O	1025-0360-P1
Stencil, 25mm SQ, 413 I/O	1025-0413-P1
Stencil, 25mm x 25, 552 I/O	1025-0552-P1

Optional Stencil	Part Number
Stencil, 27mm SQ, 225 I/O	1027-0225-P1
Stencil, 27mm SQ, 256 I/O	1027-0256-P1
Stencil, 27mm SQ, 272 I/O	1027-0272-P1
Stencil, 27mm SQ, 292 I/O	1027-0292-P1
Stencil, 27mm SQ, 316 I/O	1027-0316-P1
Stencil, 27mm SQ, 324 I/O	1027-0324-P1
Stencil, 27mm SQ, 328 I/O	1027-0328-P1
Stencil, 27mm SQ, 336 I/O	1027-0336-P1
Stencil, 27mm SQ, 352 I/O	1027-0352-P1
Stencil, 27mm SQ, 388 I/O	1027-0388-P1
Stencil, 27mm SQ, 452 I/O	1027-0452-P1
Stencil, 27mm SQ, 496 I/O	1027-0496-P1
Stencil, 27mm SQ, 672 I/O	1027-0672-P1
Stencil, 27mm SQ, 676 I/O	1027-0676-P1
Stencil, 29mm SQ, 483 I/O	1029-0483-P1
Stencil, 29mm SQ, 780 I/O	1029-0780-P1
Stencil, 31mm SQ, 304 I/O	1031-0304-P1
Stencil, 31mm SQ, 316 I/O	1031-0316-P1
Stencil, 31mm SQ, 329 I/O	1031-0329-P1
Stencil, 31mm SQ, 360 I/O	1031-0360-P1
Stencil, 31mm SQ, 421 I/O	1031-0421-P1
Stencil, 31mm SQ, 896 I/O	1031-0896-P1
Stencil, 31mm SQ, 900 I/O	1031-0900-P1
Stencil, 32.5mm x 25, 474 I/O	1032-0474-P1
Stencil, 32mm SQ, 624 I/O	1032-0624-P1
Stencil, 32.5mm SQ, 937 I/O	1032-0937-P1
Stencil, 35mm SQ, 503 I/O	1033-0503-P1
Stencil, 27mm SQ, 313 I/O	1035-0313-P1
Stencil, 35mm SQ, 352 I/O	1035-0352-P1
Stencil, 35mm SQ, 356 I/O	1035-0356-P1
Stencil, 35mm SQ, 388 I/O	1035-0388-P1
Stencil, 35mmSQ, 420 I/O	1035-0420-P1
Stencil, 35mm SQ, 456 I/O	1035-0456-P1
Stencil, 35mm SQ, 480 I/O	1035-0480-P1
Stencil, 35mm SQ, 544 I/O	1035-0544-P1
Stencil, 35mm SQ, 580 I/O	1035-0580-P1
Stencil, 35mm SQ, 724 I/O	1035-0724-P1
Stencil, 35mm SQ, 1152 I/O	1035-1152-P1
Stencil, 37mm SQ, 480 I/O	1037-0480-P1
Stencil, 37mm SQ, 593 I/O	1037-0593-P1
Stencil, 37.5mm SQ, 480 I/O	1038-0480-P1
Stencil, 40mm SQ, 432 I/O	1040-0432-P1
Stencil, 40mm SQ, 503 I/O	1040-0503-P1
Stencil, 40mm SQ, 520 I/O	1040-0520-P1
Stencil, 40mm SQ, 596 I/O	1040-0596-P1
Stencil, 40mm SQ, 600 I/O	1040-0600-P1
Stencil, 40mm SQ, 680 I/O	1040-0680-P1
Stencil, 42.5mm SQ, 560 I/O	1042-0560-P1
Stencil, 42.5mm x 32.5, 824 I/O	1042-0824-P1
Stencil, 45mm SQ, 731 I/O	1045-0731-P1

Accessories

Training Kits & Aids

	Description	Part Number
Soldering	Terminal Soldering Kit	6030-0062
	Axial Lead Component Soldering Kit	6030-0063
	I.C. Soldering Kit	6030-0019
	SOICL-20 Kit	6030-0065
	Soldering Skill Evaluation Kit	6030-0001
Repair	Repair Skills Development Kit	6030-0229
	Desoldering Demonstration Board (Mounted Components)	6030-0011
	Multilayer Training Kit	6993-0104
	Flex-Circuit Training Kit	6993-0103
Surface Mount	SMD Kit, Small Components (SOIC, chip caps, SOT, MELF)	6030-0017
	SMD Kit, Large Components (SOIC, OFF, PLCC-28, PLCC-68, SOLIC)	6030-0018
	Board only, for above	1200-0208
	Small Populated SMD Board	6020-0068
Replacement Parts	QFP 160	1187-0178-P24
	TQFP 100	1187-0179-P90
	TSOP 32	1187-0180-P156
	SOIC 14-Pin, Dummy	1187-0081-P5
	Chip Cap, 0805 Dummy	1187-0082-P10
	Chip Cap, 1206 Dummy	1187-0083-P10
	SOT-23 Transistor, Dummy	1187-0084-P10
	PLCC 28-Lead, Dummy	1187-0086-P3
	PLCC 68-Lead, Dummy	1187-0087-P3
	SOICL 20-Pin, Dummy	1187-0088-P3
	Turret Terminals	1205-0012-P100
	Hook Terminals	1205-0048-P100
	Connector Pins	1205-0014-P100
	Epoxy Kit, Two-Part	1233-0004-P1

PACE BGA Rework Systems



TF 1700 Optional Items and Replacement Parts

Description	Part Number
Fuse Holder 5 x 20mm	1161-0008-P1
Micro-Positioner	1251-0117-P1
Panel Mount Fitting (vacuum)	1259-0135-P1
Low Pressure Pump	1334-0021-P1
Nitrogen Solenoid	1336-0047-P1
Flowmeter (Manual)	1348-0613-P1
Diaphragm Pump (vacuum) TF 1700 Only	6000-0311-P1
Blower Pump (230 volt)	1360-0320-P1
Blower Pump (120 volt)	1360-0368-P1
Air Flow Sensor	3008-0138-P1
Laser Pointer	6000-0239-P1
Board Cooling Fan	6000-0255-P1
High Voltage PCB (TF 1500 / TF 1700)	6020-0155-P1
Suction Cup (includes 3)	6993-0202-P1
Flat Screen Monitor 15" inch	7015-0010-P1
PCB Main TF 1700	6020-0205-P1
Pre Heater (120 volt) TF 1700	6000-0335-P1
Pre Heater (230 volt) TF 1700	6000-0336-P1
Heater Cover for Top-Mounted Theta Control (Converts to front-mounted)*	6993-0297-P1
TF 1700 Top Heater 230v with Front Theta Control	6000-0344-P1
TF 1700 Top Heater 120v with Front Theta Control	6000-0343-P1
Nitrogen Solenoid TF 1700	6000-0313-P1
Air Flow Sensor (Systems with Theta adjustment on front)	3008-0280-P1
Auto Control Flow Meter (Systems with Theta adjustment on front)	1198-0019-M-P1
PV-65 Pik Vac Vacuum Wand	7027-0001-P1
Optical Alignment Kit	4018-0100-P1
Vacuum Pik Kit TF 1700 / TF 2700	6993-0276-P1
Small Vacuum Pik (TF 1700 / TF 2700 only)	1121-0927-P1
Odd Shaped Board Holder Kit	6000-0244-P1
K-Type Thermocouple Pk2	1340-0174-P1
Hex Key Set	6016-0033
Stencil Platform Assembly	6000-0247-P1
Flux Tray Assembly	6000-0245-P1
Cable, RS232	3008-0175
Tool, Nozzle/Chip Assy	1100-0231-P1
PCB Support	6000-0297-P1
Hot Grip Removal Pad	1100-0307-P1
Stencil, Component, Leads	1001-0001
Centering Clamp Assembly	6000-0285-P1

*If current Theta is top-mounted, 6993-0297-P1 must be purchased with replacement heater.

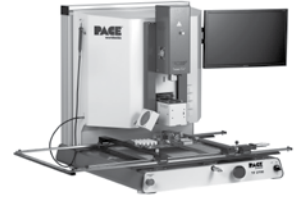
PACE BGA Rework Systems



TF 1700 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
Air Flow Thermocouple	Air flow sensor, TF 1700 / 2700 A07	Both	3008-0280-P1
	TF 1700, PCB, main	Both	6020-0205-P1
Printed Circuit Boards	High volt, PCB, TF 3000 / 2500	Both	6020-0155-P1
	TF white led board	Both	6020-0206-P1
	PCB, sensor TF	Both	6020-0157-P1
Vacuum Pumps (Heater pick "Z" Force & pick vacuum)	Vacuum pump, TF1700 / 2700	Both	6000-0311-P1
Flow Pump (Blower)	TF air pump assembly, domestic	115V	1336-0045-P1
	TF air pump assembly, export	230V	1336-0046-P1
Vacuum Picks	TF vacuum pick kit - 7 sizes A07	Both	6993-0276-P1
Computer Video Cable	Video cable, cronus card A06	Both	3008-0277-P1
Computer Video Card	Frame grabber card	Both	6020-0178-P1
Rs 232 Cable (Serial Cable)	Cable, RS232		3008-0175-P1
Heater Head Motor	Assembly, Heater head motor	Both	1334-0041-P1
Communcations Bracket	Assembly, COMM bracket	Both	6000-0302-P1
Heater Head Cover	Assembly, TF Heater head cover	Both	6000-0350-P1
Board Cooling Fan	Assembly, board cooling fan	Both	6000-0255-P1
Camera Drive Motor	Assembly, Camera, drive motor	Both	6000-0310-P1
Computer System (Please let PACE know which system)	Computer, XR/LS config	Both	6000-0234-P1
Air Flow Meter	TF air flow meter	Both	1198-0020
Fish Pump Assembly	TF pik-vacuum assembly	Both	1336-0049
PCB, Sensor TF			6020-0157-P1
PCB, Blue LED Assy			6020-0159-P1
Red LED PCB			6020-0184-P1
Optics Prism, TF 1700			6000-0249-P1
TF White LED Board			6020-0206-P1
PCB, Sensor TF			6020-0157-P1
Assy, PCB, TF / IR Control			6020-0218-P1
Video Cable, Cronus Card			3008-0277-P1
Frame Grabber Card			6020-0178-P1
Assembly, Heater Head Motor			1334-0041-P1
Assembly, Comm Bracket			6000-0302-P1
Assembly, TF Heater Head Cover			6000-0350-P1
TF Heater Upgrade Kit			6993-0297-P1
Assy, Camera Drive Motor			6000-0310-P1
TF Air Flow Meter			1198-0020-P1
TF Pik-Vacuum Assembly			1336-0049-P1
Valve, Proportional			1263-0036-P1
Cable, USB-A/USB-B Male 6"			3008-0295-P1
Fuse, .5AMP S.B.			1159-0248-P5
Fuse .5A, Time Lag, IEC			1159-0213-P5
Circuit Breaker 15A			1157-0097-P1
Circuit Breaker, Export			1157-0096-P1

PACE BGA Rework Systems



TF 2700 Optional Items and Replacement Parts

Description	Part Number
Fuse, 0.5 A, Slo Blo (230 volt)	1159-0213-P5
Fuse Holder 5 x 20mm	1161-0008-P1
Micro-Positioner	1251-0117-P1
Panel Mount Fitting (vacuum)	1259-0135-P1
Low Pressure Pump	1334-0021-P1
Nitrogen Solenoid TF 2500	1336-0047-P1
Nitrogen Solenoid TF 2700	6000-0313-P1
Diaphragm Pump (vacuum) TF 2700 Only	6000-0311-P1
Blower Pump (230 volt)	1360-0320-P1
Blower Pump (120 volt)	1360-0368-P1
Air Flow Sensor	3008-0138-P1
Laser Pointer	6000-0239-P1
Board Cooling Fan	6000-0255-P1
Pre-heater Assembly (120 volt) TF 2700	1336-0071-P1
Pre-heater Assembly (230 volt) TF 2700	1336-0072-P1
High Voltage PCB (TF 2700)	6020-0155-P1
PCB Main TF 2700	6020-0182-P1
Flat Screen Monitor 19"	1107-0032-P1
Heater Cover for Top-Mounted Theta Control (Converts to front-mounted)*	6993-0297-P1
TF 2700 Top Heater 230v with Front Theta Control	6000-0346-P1
TF 2700 Top Heater 120v with Front Theta Control	6000-0345-P1
Air Flow Sensor (Systems with Theta adjustment on front)	3008-0280-P1
Heater Upgrade Kit (Converts top-mounted Theta to front-mounted)*	6993-0297-P1
PCB, Sensor TF	6020-0157-P1
PCB, Main Control	6020-0182-P1
TF White LED Board	6020-0206-P1
Assembly, PCB TF / IR Control	6020-0218-P1
Vacuum Pump TF 1700 / TF 2700	6000-0311-P1
TF Air Pump Assembly, Export	1336-0046-P1
Video Cable, Cronus Card	3008-0277-P1
Frame Grabber Card	6020-0178-P1
Assembly, Heater Head Motor Drive	1336-0067-P1
Assembly, Comm Bracket	6000-0294-P1
Assembly, TF Heater Head Cover	6000-0350-P1
TF Heater Upgrade Kit	6993-0297
Assembly, Camera Drive Motor	6000-0310-P1
TF Pik-Vacuum Assembly	1336-0049
Valve, Proportional	1263-0036
Cable, USB-A/USB-B, male 6"	3008-0295-P1
Fuse, .5AMP S.B.	1159-0248-P5
Breaker, 20A, 250V	1157-0110-P1
Breaker, 10A, 250V	1157-0111-P1

*If current Theta adjustment is top-mounted, 6993-0297-P1 must be purchased with replacement heater assembly.

PACE BGA Rework Systems



TF 2700 Optional Items and Replacement Parts

Description	Part Number
Auxilliary Pre-Heater Therna Couple PCB	6020-0181-P1
Aux Pre Heater Control PCB	6020-0180-P1
Odd Shaped Board Holder Kit	6000-0244-P1
K-Type Thermocouple Pk2	1340-0174-P1
Optical Alignment Kit	4018-0100-P1
Hex Key Set	6016-0033
Stencil Platform Assembly	6000-0247
Pik-Vac Wand	7027-0001-P1
Flux Tray Assembly	6000-0245
Cable, RS232	3008-0175
Vacuum Pick Kit TF 2700	6993-0276
Small Vacuum Pik (TF 1700 / TF 2700 only)	1121-0927-P1
Tool, Nozzle / Chip Assy	1100-0231-P1
PCB Support	6000-0298-P1
Hot Grip Removal Pad	1100-0307
Stencil, Component, Leads	1001-0001
Centering Clamp Assembly	6000-0285-P1
PACE Mouse Mat	1317-0049
Leg, Board Holder	1348-0700-01

PACE BGA Rework Systems



IR 1000 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
Top Heater	Kit, HTR Replacement, IR 1000	115V	6993-0302-P1
	Kit, HTR Replacement, IR 1000	230V	6993-0303-P1
Bottom Heater	Assy, Preheater, IR 1000, DOM	115V	6000-0400-P1
	Assy, IR 3000, PreHeater, EXP	230V	6000-0401-P1
Fan & Laser Assembly	Assembly, Fan Box, IR 1000	Both	6993-0304-P1
Printed Circuit Board	Main Control PC Board, IR 1000	Both	6020-0221-P1
Fan, Base Assembly	Fan, 115VAC, 60Hz 10 Watts	115V	6000-0216-P1
	Fan, 230VAC 60Hz 12 Watts	230V	6000-0217-P1
Vacuum Pump	Assembly, Flow Pump	Both	1336-0081-P1
Fish Pump Assembly	Assembly, Pump, 21V	Both	1336-0078-P1
Thermocouple Probe	Thermocouple Probe, PCB, IR 1000, 6"	Both	7021-0009-P1
Low Voltage Fuse	Fuse, .5 AMP S.B.		1159-0248-P5
	Fuse, 0.5A, Time Lag, IEC, P5		1159-0213-P5
Main Chassis Fuse	Fuse, 15A, Slow-Blow, IR1000, DOM	250V	1159-0279-P5
	Fuse, 7A, Time Lag, IR1000, EXP	250V	1159-0278-P5

PACE BGA Rework Systems



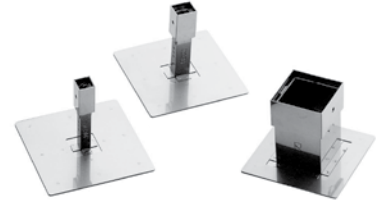
IR 3000 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
Top Heater	Heater IR 3000	115V	6000-0351-P1
	Heater IR 3000	230V	6000-0352-P1
Bottom Side Heater (Lower Heater)	Assy, Pre-heater, IR 3000, DOM	115V	6000-0362-P1
	Assy, IR 3000, Pre-heater, EXP	230V	6000-0364-P1
Printed Circuit Boards	Assy, PCB, TF/IR Control	Both	6020-0218-P1
	High Voltage PCB, TF/IR	Both	6020-0219-P1
	TF White LED Board	Both	6020-0206-P1
	PCB, Sensor TF	Both	6020-0157-P1
Vacuum Pumps (Heater Pick "Z" Force & Pick Vacuum)	Vacuum Pump, TF 1700/2700	Both	6000-0311-P1
Vacuum Picks	IR Vacuum Pick Kit, 6 Sizes	Both	6993-0290-P1
Computer Video Cable	Cable, Video, External, IR 3000	Both	3008-0292-P1
Computer Video Card	FRAME GRABBER Card	Both	6020-0178-P1
USB Cable	Cable, USB-A / USB-B, Male, 6'	Both	3008-0295-P1
Heater Head Motor	Assembly, Heater Head Motor	Both	1334-0041-P1
Heater Head Cover	Assy, Heater Head Cover, IR 3000, DOM	115V	6000-0360-01
	Assy, Heater Head Cover, IR 3000, EXP	230V	6000-0360-02
Board Cooling Fan	Assembly, Board Cooling Fan	Both	6000-0255-P1
Camera Drive Motor	Assembly, Camera Drive Motor	Both	6000-0310-P1
Fish Pump Assembly	TF Pik-Vacuum Assembly	Both	1336-0049

ThermoFlo BGA Nozzles

(for use with TF 1700 & TF 2700)

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured for special or non-standard applications. Contact PACE for more information.



ThermoFlo Nozzle Chart

Maximum Component Size	Nozzle Dimensions	Part Number	Maximum Component Size	Nozzle Dimensions	Part Number
5mm x 5mm (0.19" x 0.19")	8mm x 8mm (0.31" x 0.31")	4038-7001	31mm x 31mm (1.22" x 1.22")	33mm x 33mm (1.3" x 1.3")	4038-7031
6mm x 6mm (0.24" x 0.24")	9mm x 9mm (0.35" x 0.35")	4038-7042	32mm x 17mm (1.26" x 0.67")	35mm x 20mm (1.37" x 0.79")	4038-7053
6mm x 8mm (0.24" x 0.31")	9mm x 11mm (0.35" x 0.43")	4038-7002	32.5mm x 23mm (1.28" x 0.90")	35.5mm x 26mm (1.40" x 1.02")	4038-7051
7.3mm x 7mm (0.29" x 0.28")	10.3mm x 10mm (0.40" x 0.40")	4038-7040	32.5mm x 25mm (1.28" x 0.98")	35.5mm x 28mm (1.40" x 1.1")	4038-7056
8mm x 8mm (0.31" x 0.31")	11mm x 11mm (0.43" x 0.43")	4038-7041	33mm x 33mm (1.29" x 1.29")	36mm x 36mm (1.42" x 1.42")	4038-7028
8.1mm x 8.1mm (0.31" x 0.31")	11.1mm x 11.1mm (0.43" x 0.43")	4038-7055	35mm x 35mm (1.37" x 1.37")	38mm x 38mm (1.5" x 1.5")	4038-7011
8.2mm x 12.7mm (0.32" x 0.50")	11.2mm x 15.7mm (0.44" x 0.62")	4038-7003	38.1mm x 25.8mm (1.50" x 1.01")	41.1mm x 28.8mm (1.61" x 1.13")	4038-7066
9mm x 9mm (0.35" x 0.35")	12mm x 12mm (0.47" x 0.47")	4038-7004	40mm x 40mm (1.57" x 1.57")	43mm x 43mm (1.7" x 1.7")	4038-7024
10mm x 10mm (0.39" x 0.39")	13mm x 13mm (0.51" x 0.51")	4038-7005	41mm x 41mm (1.61" x 1.61")	43mm x 43mm (1.7" x 1.7")	4038-7047
11.4mm x 5.1mm (0.49" x 0.20")	14.4mm x 8.1mm (0.56" x 0.31")	4038-7050	42mm x 42mm (1.65" x 1.65")	45mm x 45mm (1.77" x 1.77")	4038-7032
13mm x 10mm (0.51" x 0.40")	16mm x 13mm (0.63" x 0.51")	4038-7039	42.5mm x 32.5mm (1.67" x 1.40")	45.5mm x 35.5mm (1.80" x 1.39")	4038-7054
13mm x 13mm (0.51" x 0.51")	16mm x 16mm (0.63" x 0.63")	4038-7006	43mm x 43mm (1.7" x 1.7")	46mm x 46mm (1.81" x 1.81")	4038-7045
14mm x 22mm (0.55" x 0.87")	17mm x 25mm (0.67" x 0.99")	4038-7021	44mm x 33mm (1.73" x 1.29")	47mm x 36mm (1.85" x 1.41")	4038-7064
15mm x 15mm (0.59" x 0.59")	18mm x 18mm (0.71" x 0.71")	4038-7007	44mm x 44mm (1.73" x 1.73")	47mm x 47mm (1.85" x 1.85")	4038-7043
15.34mm x 12.7mm (0.60" x 0.50")	18.34mm x 15.7mm (0.72" x 0.61")	4038-7063	44.5mm x 44.5mm (1.75" x 1.75")	47.5mm x 47.5mm (1.87" x 1.87")	4038-7012
15.6mm x 5.1mm (0.61" x 0.20")	18.6mm x 8.1mm (0.73" x 0.31")	4038-7062	46mm x 46mm (1.81" x 1.81")	49mm x 49mm (1.93" x 1.93")	4038-7046
16.5mm x 8mm (0.65" x 0.31")	19.5mm x 11mm (0.77" x 0.43")	4038-7027	48mm x 48mm (1.89" x 1.89")	51mm x 51mm (2" x 2")	4038-7049
17mm x 11mm (0.67" x 0.43")	20mm x 14mm (0.79" x 0.55")	4038-7052	50mm x 50mm (1.97" x 1.97")	53mm x 53mm (2.1" x 2.1")	4038-7022
17mm x 17mm (0.67" x 0.67")	20mm x 20mm (0.79" x 0.79")	4038-7008	56mm x 17mm (2.2" x 0.67")	59mm x 20mm (2.32" x 0.79")	4038-7037
19mm x 19mm (0.75" x 0.75")	22mm x 22mm (0.87" x 0.87")	4038-7026	60mm x 60mm (2.36" x 2.36")	63mm x 63mm (2.5" x 2.5")	4038-7023
20mm x 8mm (0.79" x 0.31")	23mm x 11mm (0.90" x 0.43")	4038-7058	Connector, 16mm x 13mm (0.63" x 0.51")	19mm x 16mm (0.75" x 0.63")	4038-7033
20mm x 20mm (0.79" x 0.79")	23mm x 23mm (0.90" x 0.90")	4038-7061	Connector, 19mm x 8mm (0.75" x 0.31")	22mm x 11mm (0.87" x 0.43")	4038-7036
21mm x 12.75mm (0.83" x 0.50")	24mm x 15.75mm (0.94" x 0.62")	4038-7060	Connector, 27mm x 13mm (1.06" x 0.51")	30mm x 16mm (1.18" x 0.63")	4038-7034
21mm x 25mm (0.83" x 0.98")	23mm x 28mm (0.91" x 1.1")	4038-7029	Connector, 30mm x 12mm (1.18" x 0.47")	33mm x 15mm (1.3" x 0.59")	4038-7035
22mm x 22mm (0.86" x 0.86")	25mm x 25mm (0.98" x 0.98")	4038-7057	LQFP 9mm x 9mm (0.35" x 0.35")	12mm x 12mm (0.47" x 0.47")	4038-7016
23mm x 23mm (0.90" x 0.90")	26mm x 26mm (1.02" x 1.02")	4038-7009	LQFP 12mm x 12mm (0.47" x 0.47")	15mm x 15mm (0.59" x 0.59")	4038-7017
25mm x 25mm (0.98" x 0.98")	28mm x 28mm (1.1" x 1.1")	4038-7025	LQFP 14mm x 14mm (0.55" x 0.55")	17mm x 17mm (0.67" x 0.67")	4038-7020
27mm x 27mm (1.06" x 1.06")	30mm x 30mm (1.18" x 1.18")	4038-7010	LQFP 16mm x 16mm (0.63" x 0.63")	19mm x 19mm (0.75" x 0.75")	4038-7014
28mm x 16mm (1.1" x 0.63")	31mm x 19mm (1.22" x 0.75")	4038-7038	LQFP 16mm x 22mm (0.63" x 0.87")	19mm x 25mm (0.75" x 0.99")	4038-7019
28mm x 28mm (1.1" x 1.1")	31mm x 31mm (1.22" x 1.22")	4038-7048	LQFP 22mm x 22mm (0.87" x 0.87")	25mm x 25mm (0.98" x 0.98")	4038-7013
28.5mm x 17mm (1.12" x 0.67")	31.5mm x 20mm (1.12" x 0.79")	4038-7059	LQFP 26mm x 26mm (1.02" x 1.02")	29mm x 29mm (1.14" x 1.14")	4038-7018
29mm x 29mm (1.14" x 1.14")	32mm x 32mm (1.26" x 1.26")	4038-7030	LQFP 30mm x 30mm (1.18" x 1.18")	33mm x 33mm (1.29" x 1.29")	4038-7015
30mm x 30mm (1.18" x 1.18")	33mm x 33mm (1.3" x 1.3")	4038-7044	Nozzle Kit	1mm (0.04") to 7mm (0.28")	6993-0244

PACE Accessories

Flux Applicator

	Description	Part Number
	Allows for precise and repeatable application of flux by dipping component.	6993-0218-P1

Stenciling Products

	Description	Part Number
	Stencil Bracket Kit Applies solder paste to component, reducing the difficulty and mess associated with PCB stenciling. The Stencil Bracket Kits do not include stencils. Stencils are purchased separately as required by solder ball count geometry on component packages. Both the Stencil Bracket Kit and a stencil are required to apply solder paste to the component. The Stencil Bracket Kits may be used on any of our currently sold stencils.	6993-0248-P1

Fume Extraction Systems



Replacement Parts

Description		Part Number
Arm-Evac 50 Pre-Filter		8883-0125-P5
Arm-Evac 50 Economy Filter		8883-0300-P5
Arm-Evac 50 General Purpose Filter		8883-0280-P1
Arm-Evac 50 CleanRoom Filter		8883-0290-P1
Arm-Evac 50 Adhesive Filter		8883-0295-P1
Arm-Evac 105 Pre-Filter		8883-0111-P5
Arm-Evac 105 High Capacity Pre-Filter		8883-0938-P10
Arm-Evac 105 Economy Filter		8883-0871-P1
Arm-Evac 105 General Purpose Filter		8883-0901-P1
Arm-Evac 105 CleanRoom Filter		8883-0921-P1
Arm-Evac 105 High Capacity Filter		8883-0936-P1
Arm-Evac 105 Adhesive Filter		8883-0951-P1
Arm-Evac 200 / 250 Pre-Filter		8883-0111-P5
Arm-Evac 200 / 250 High Capacity Pre-Filter		8883-0938-P10
Arm-Evac 200 / 250 Economy Filter		8883-0871-P1
Arm-Evac 200 / 250 General Purpose Filter		8883-0931-P1
Arm-Evac 200 / 250 CleanRoom Filter		8883-0921-P1
Arm-Evac 200 / 250 High Capacity Filter		8883-0936-P1
Arm-Evac 200 / 250 Adhesive Filter		8883-0951-P1
Arm-Evac 500 Pre-Filter		8883-0145-P5
Arm-Evac 500 General Purpose Filter		8883-0955-P1
Arm-Evac 500 CleanRoom Filter		8883-0965-P1
Arm-Evac 500 Carbon Filter		8883-0956-P1
Arm-Evac 50 120v & 230v Replacement Fuse		1159-0221-P5
Arm-Evac 105/200/250/500 120v Replacement Fuse		1159-0280-02-P5
Arm-Evac 105/200/250/500 230v Replacement Fuse		1159-0280-01-P5
Motor and Capacitor	Arm-Evac 50	8884-0200-P1
	Arm-Evac 105	6000-0410-P1
	Arm-Evac 105E	6000-0409-P1
	Arm-Evac 200	6000-0408-P1
	Arm-Evac 200E	6000-0407-P1
	Arm-Evac 250	6000-0402-P1
	Arm-Evac 250E	6000-0403-P1
	Arm-Evac 500	6000-0416-P1
Fume Main PCB	Arm-Evac 500E	6000-0417-P1
	Arm-Evac 250	8884-2550-P1
Arm-Evac 500		8884-2575-P1



Solutions and systems for soldering, rework and repair of electronics

A Worldwide Commitment

With offices worldwide, PACE is a recognized world leader in the development of solutions for the assembly and repair of highly advanced electronics. Our expertise extends back to the dawn of the modern electronics industry. In 1958, PACE introduced training programs for the repair of printed wire assemblies and soon after, revolutionized the industry by creating the first self-contained vacuum desoldering system.

Today, PACE continues to provide innovative solutions, products and training for the rework, repair and testing of printed circuit assemblies. Our unique capabilities and evolving vision have provided universal solutions for thru-hole and surface mount assembly and rework problems for the most advanced electronics.

Additionally, PACE manufactures Fume Extraction Systems to reduce exposure to harmful particulates and gases created from hand soldering operations. PACE Fume Extraction Systems effectively remove these contaminants from the worker's breathing zone thereby reducing or eliminating health risks and improving productivity.

Our strong commitment and history of achievement has resulted in an unparalleled range of Assembly, Repair and Fume Extraction solutions to meet your needs whether working to ISO-9001, industrial, military or your own internal specifications. Whatever the challenge, PACE stands ready to help you set a new standard.

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PACE products meet or exceed all applicable military or civilian EOS/ESD, temperature stability and other specifications, including MIL-STD-2000, ANSI/J-STD001, IPC 7711, IPC 7721 and IPC-A-610.

www.paceworldwide.com

PACE Worldwide
255 Air Tool Drive
Southern Pines, NC 28387

phone 1.877.882.PACE
fax 910.695.1594

PACE Europe Limited
11 Holdom Avenue
Bletchley, Milton Keynes,
Buckinghamshire, MK1 1QU (UK)

phone +44 1908 277666
fax +44 1908 277777

