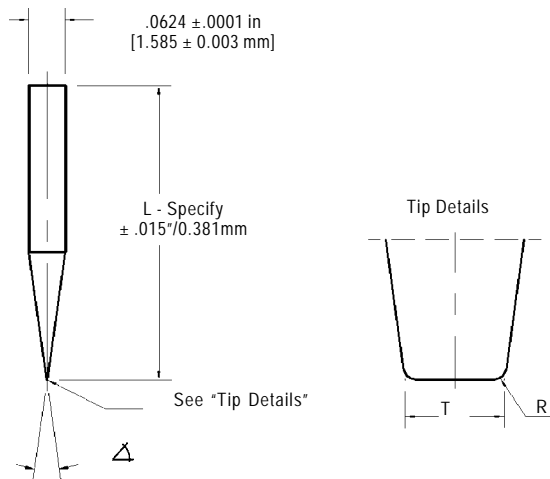


PF NEEDLE

PF20 bonding needles are normally used in Manual Thermocompression Bonders. They are mainly used in microwave applications where the bonding pads are too small to permit normal Ball and Stitch Bonding Techniques. Normally the wire is first positioned over the bonding pad area and then the bonding needle is used to make the bond. Wire diameters of .0010"/25 μ m or less are normally used in this application.



STANDARD DIMENSIONS		
Tip Diameter T in / μ m $\pm .0002/5$	Radius R in / μ m $\pm .0001/3$	Included Angle Δ
.0010 / 25	.0020 / 51	30 or 15
.0015 / 38	.0020 / 51	30 or 15
.0020 / 51	.0003 / 8	30 or 15

GENERAL GUIDELINES ON HOW TO ORDER PF NEEDLES

STYLE	
PF20 = PERIPHERAL NEEDLE (.0010"/25µm or less wire diameter)	

MATERIAL	BOND FLAT	TOOL LENGTH (TL)
W Tungsten Carbide Ultra Fine Grain for Aluminum Wire	Will rely on specific application requirements (wire diameter used, bond pad size) – see dimension Table	1" = 1.000" / 25.4 µm 1/2" = .500" / 12.7 µm

HOW TO ORDER	
SPECIFY	Style – Length – Tip Diameter (T) – Radius (R) - Included Angle (°)
EXAMPLE	PF20 - 1" - .0020 - .0003 - 30° PF20 - 1/2" - .0015 - .0002 - 30°