

## BOARD LEVEL POWER SEMICONDUCTOR HEAT SINKS

### 260 SERIES CUP CLIPS FOR TO-5 CASE STYLE SEMICONDUCTORS

TO-5

Characteristics	TO-5
Thermal Resistance – Epoxy Insulated	14° C/W
Breakdown Voltage – Epoxy Type (VAC), 60 Hz	500
Recommended Operating Voltage, AC or DC	
Clean Conditions: % Hipot Rating	50
Dusty Conditions: % Hipot Rating	30
Dirty Conditions: % Hipot Rating	10 to 20
Temperature Range — Continuous (C°)	-73/+149

Model	Depth of Tapped Base
260-4T5E	0.093 (2.36)
260-4TH5E	0.125 (3.18)

<b>Thread Size:</b>	4 = #4-40 UNC	<b>Base Style:</b> H = hex
	6 = #6-32 UNC	<b>Semiconductor Case Style:</b> 5 = TO-5
<b>Mounting Style:</b>	T = tapped	<b>Insulation</b> E = epoxy
	S = stud	
	P = plain	

TO-5 CASE STYLE CUP CLIPS — ORDERING GUIDE				
Standard P/N	Outline Dimension Insulation Type	L x W x I.D. in. (mm)	Weight lbs. (grams)	Case Style
260-4T5E	Epoxy Insulated	0.370 (9.4) x 0.380 (9.7) dia. x 0.290 (7.4)	0.0024 (1.09)	TO-5
260-4TH5E	Epoxy Insulated	0.400 (10.2) x 0.370 (9.4) hex. x 0.290 (7.4)	0.0031 (1.41)	TO-5
260-6SH5E	Epoxy Insulated	0.557 (14.1) x 0.370 (9.4) hex. x 0.290 (7.4)	0.0037 (1.68)	TO-5

**Materials and Finish:** Cups – beryllium copper, black ebolon "C"; Bases – brass, black ebolon "C"

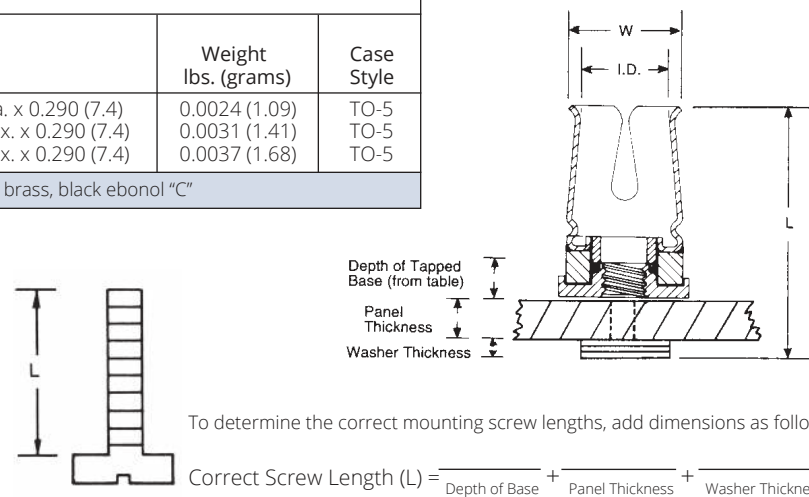
#### Base Mounting Configurations — TO-5

**Plain Type** — Epoxy bonded, or used with #4 pan head screws.

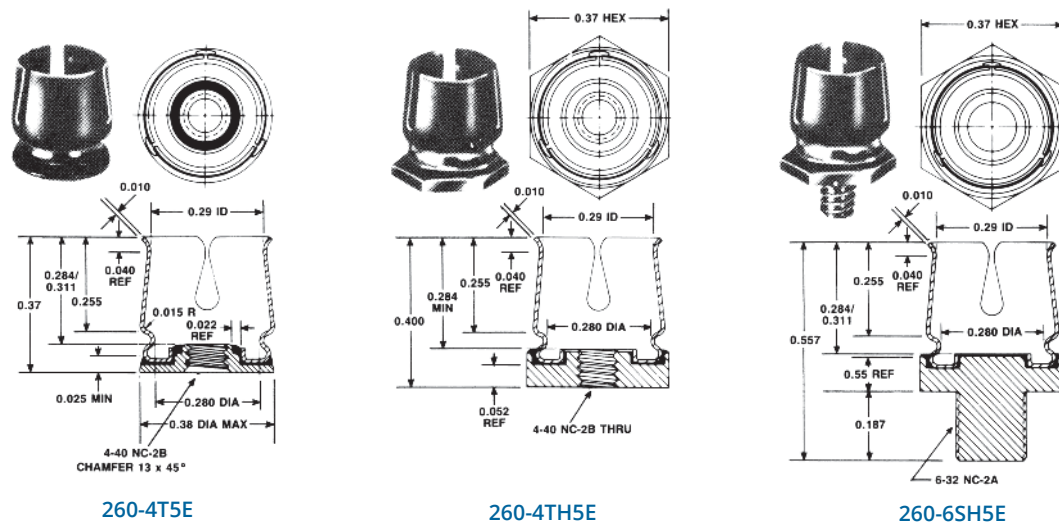
**Tapped Base** — #4-40 UNC screw (not supplied) fits tapped hole. Care should be taken not to use too long a screw, which could short against the semiconductor case. For correct screw lengths:

$$\text{Correct Screw Length (L)} = \text{Depth of Base} + \text{Panel Thickness} + \text{Washer Thickness}$$

**Stud Mounting Base.** #6-32 UNC. Nuts and washers not supplied. Stud hole must be slightly countersunk to ensure flat mounting.



### EPOXY INSULATED FOR TO-5 260 SERIES



Diodes

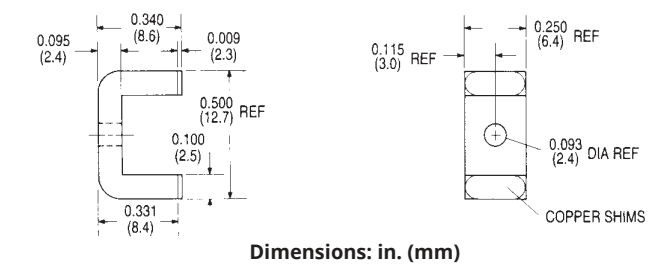
### THERMAL LINKS FOR FUSED GLASS DIODES

### 258 SERIES

The thermal resistance from diode leads to chassis or heat sink is 12°C/watt, when unit is mounted with TYPE 120 Joint Compound. If a 10°C/watt chassis or sink to ambient impedance is available, the thermal resistance from the diode leads to ambient is reduced from about 150°C/watt to 22°C/watt.

Standard P/N	Dimensions in. (mm)	Material	Finish	Weight lbs. (grams)
258	0.500 (12.7) x 0.250 (6.4) x 0.340 (8.6)	Aluminum	DeltaCoate™ 151 on all surfaces except solder pads and base	0.0018 (0.82)

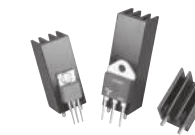
#### MECHANICAL DIMENSIONS



### 634 SERIES

### SLIM PROFILE UNIDIRECTIONAL FIN VERTICAL MOUNT HEAT SINK

TO-220 and TO-218

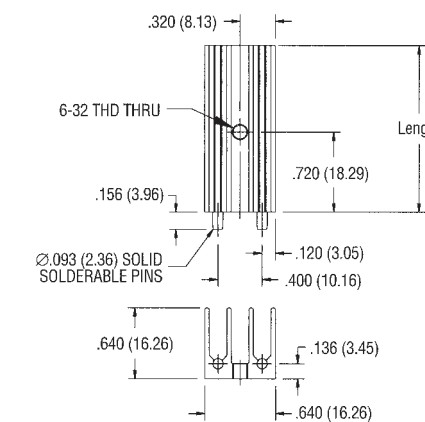


These slim profile unidirectional fin heat sinks offer users two assembly alternatives for vertically mounting TO-220 and TO-218 components. Models are available with or without wave-solderable pins on 0.40 in. (10.2) centers, making them ideal for a variety of applications where quick assembly is needed and space is at a premium.

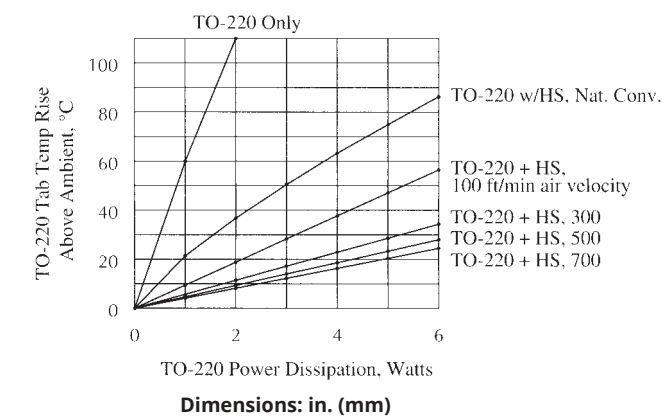
Standard P/N		Height Above PC Board in. (mm)	Footprint Dimensions in. (mm)	Weight lbs. (grams)
Plain Pin	Without Pin			
634-10ABEP	634-10AB	1.000 (25.4)	0.640 (16.26) x 0.640 (16.26)	0.016 (7.48)
634-15ABEP	634-15AB	1.500 (38.1)	0.640 (16.26) x 0.640 (16.26)	0.025 (11.21)
634-20ABEP	634-20AB	2.000 (50.8)	0.640 (16.26) x 0.640 (16.26)	0.033 (14.95)

**Material:** Aluminum, Black Anodized.

#### MECHANICAL DIMENSIONS



#### TYPICAL THERMAL PERFORMANCE FOR 634-15ABP



#### NOTES:

1. Thermal compound is assumed between device and heat sink.
2. Tab temp with longer heat sink (634-20ABP) will typically be about 15% cooler. Tab temp with shorter heat sink (634-10ABP) will typically be about 25% higher.