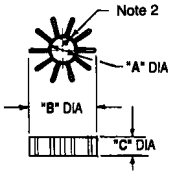
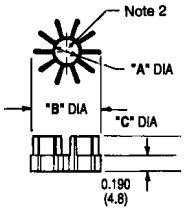
BOARD LEVEL POWER SEMICONDUCTOR HEAT SINKS

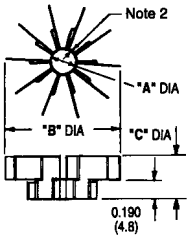
200 SERIES — *High-Efficiency Heat Sinks for Small Metal Can Power Semiconductors*



Single-Level Star
201, 202, 204, 205, 211 Series



Dual-Level Star
203,207,213 Series



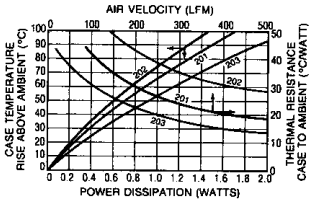
Dual-Level Sunburst
209, 215 Series

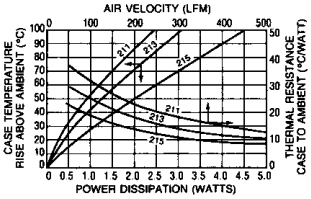
Available Standard P/N & Finish Types	Semiconductor Case Diameter Min/Max in. (mm)	Heat Sink Inside Dia. "A" in. (mm)	Heat Sink Outside Dia. "B" in. (mm)	Heat Sink Height "C" in. (mm)	Natural Convection Case Rise Above Ambient	Forced Convection (ΘCA@200 LFM)	Applicable Power Semiconductor Case Types
▲ 201CB, 201AB	0.161 (4.1)/0.240 (6.1)	0.150 (3.8)	0.640 (16.2)	0.187 (4.8)	65°C @ 1W	31°C/W	TO-18, TO-24, TO-28, TO-40, TO-44
202CB	0.161 (4.1)/0.240 (6.1)	0.150 (3.8)	0.490 (12.5)	0.187 (4.8)	73°C @ 1W	43°C/W	
203CB	0.161 (4.1)/0.240 (6.1)	0.150 (3.8)	0.640 (16.2)	0.375 (9.5)	53°C @ 1W	23°C/W	
204CB ▲, 204SB	0.275 (7.0)/0.370 (9.4)	0.255 (6.5)	0.550 (4.8)	0.187 (4.8)	68°C @ 1W	35°C/W	TO-5, TO-9, TO-11, TO-12, TO-26, TO-29, TO-33, TO-43, TO-45
205CB ▲, 205SB	0.275 (7.0)/0.370 (9.4)	0.255 (6.5)	0.720 (18.3)	0.187 (4.8)	59°C @ 1W	28°C/W	
205AB, 205AP	0,275 (7.0)/0.370 (9.4)	0.255 (6.5)	0.720 (18.3)	0.187 (4.8)	68°C @ 1W	28°C/W	
207CB ▲, 207SB ▲	0.275 (7.0)/0.370 (9.4)	0.255 (6,5)	0.720 (18.3)	0.375 (9.5)	46°C @ 1W	20°C/W	
207AB ▲, 207AP	0.275 (7.0)/0.370 (9.4)	0.255 (6.5)	0.720 (18.3)	0.375 (9.5)	53°C @ 1W	20°C/W	
209CB, 209SB	0.275 (7.0)/0.370 (9.4)	0.255 (6.5)	1.280 (32.5)	0.437 (11.1)	30°C @ 1W	13°C/W	
211CB	0.440 (11.2)/0.544 (13.8)	0.420 (10.7)	0.830 (21.1)	0.187 (4.8)	50°C @ 1W	24°C/W	TO-8, TO-38
213CB, 213SB	0.440 (11.2)/0.544 (13.8)	0.420 (10.7)	0.830 (21.1)	0.375 (9.5)	44°C @ 1W	19°C/W	
213AB, 213AP	0.440 (11.2)/0.544 (13.8)	0.420 (10.7)	0.830 (21.1)	0.375 (9.5)	51°C @ 1W	19°C/W	
215CB, 215AB	0.440 (11.2)/0.544 (13.8)	0.420 (10.7)	1.400 (35.6)	0.437 (11.1)	28°C @ 1W	15°C/W	
215AP	0.440 (11.2)/0.544 (13.8)	0.420 (10.7)	1.400 (35.6)	0.437 (11.1)	32°C @ 1W	15°C/W	

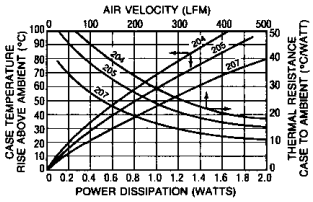
Materials and Finishes Available for 200 Series:

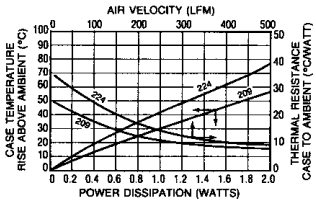
- CB — Beryllium copper; black ebonol "C" Finish
- SB — Silver-bearing copper; black ebonol "C"
- AB — Aluminum, black anodized
- AP — Aluminum, no finish applied

NATURAL AND FORCED CONVECTION CHARACTERISTICS



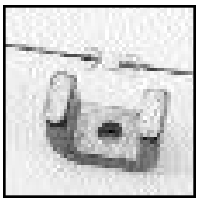






258 SERIES — *Thermal Links for Fused Glass Diodes*

DIODES

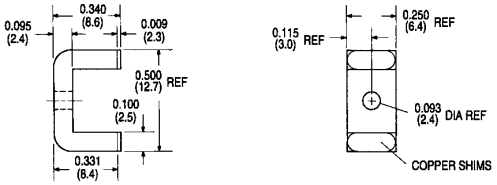


Standard P/N	Dimensions in. (mm)	Material	Finish	Weight lbs. (grams)
258 ▲	0.500 (12.7) x 0.250 (6.4) x 0.340 (8.6)	Aluminum	DeltaCoate™ 151 on all surfaces except solder pads and base	0.0018 (0.82)

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.

MECHANICAL DIMENSIONS

258 SERIES



Dimensions: in. (mm)

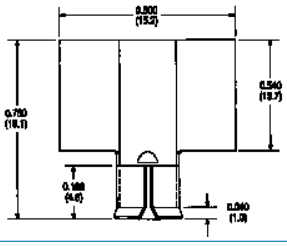
292 SERIES — *Heat Sink for Single TO-92*

TO-92

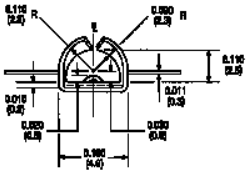
Standard P/N	Height Above PC Board in. (mm)	Overall Fin Width in. (mm)	Thermal Performance Natural Convection	Finish	Weight lbs. (grams)
292-AB ▲	0.750 (19.1)	0. 600 (15.3)	0.225°C/W @ 0.250 W	Black Anodized	0.00049 (0.22)

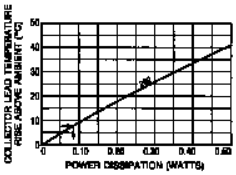
Power semiconductors packaged in a TO-92 style plastic case can be cooled effectively at little additional cost with the addition of the 292-AB heat sink. The 292-AB is effective over the typical power range of such devices. Material: Aluminum, Black Anodized.

MECHANICAL DIMENSIONS



292 SERIES



Dimensions: in. (mm)

NATURAL AND FORCED CONVECTION CHARACTERISTICS