

# CSM Series

## Board Mount Heat Sink For TO-220 Devices

The economically priced CSM Series is suitable for use with TO-220 devices found in active components as well as power resistors. With surface areas ranging from 1188 Sq. mm to 6645 Sq. mm, the CSM family comes in 5 configurations, all of them with Black Anodized surface treatment. These heatsinks offer a range of thermal performance from 18.0 to 9.8 C/W.



Each device offers solder able mounting feet and anywhere from 1, 2 or 3 mounting holes are available for convenient device attachment.

### SERIE SPECIFICATION

Heatsink Part Number	Surface Area (mm <sup>2</sup> /in <sup>2</sup> )	Weight (oz / g)	Length L (mm)	Thermal Res.* (°C/W)
CSM221-12AE	1,188/1.84	0.13/ 3.7	12	18.0
CSM221-28AE	2,772/4.30	0.3 / 8.5	28	12.8
CSM221-40AE	3,960/6.14	0.43 / 12.2	40	12.1
✕ CSM222-30AE	4,029/6.25	0.5 / 14.2	30	11.3
† CSM223-50AE	6,645/10.30	0.6 / 17.0	50	9.8

\*Free convection at 10 watts dissipation †Available for custom orders only, not offered as standard length

✕ = Discontinued

### CHARACTERISTICS

#### Heat Dissipation

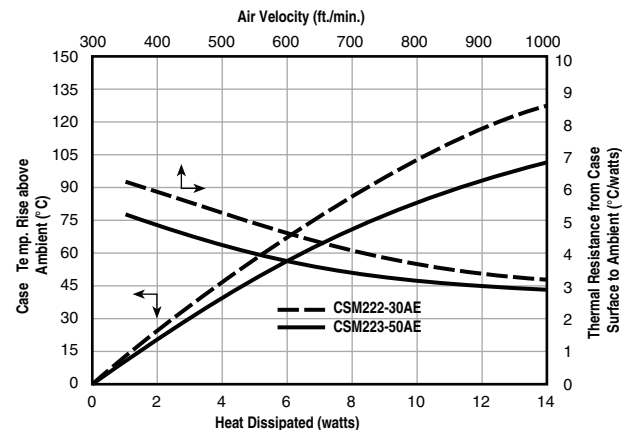
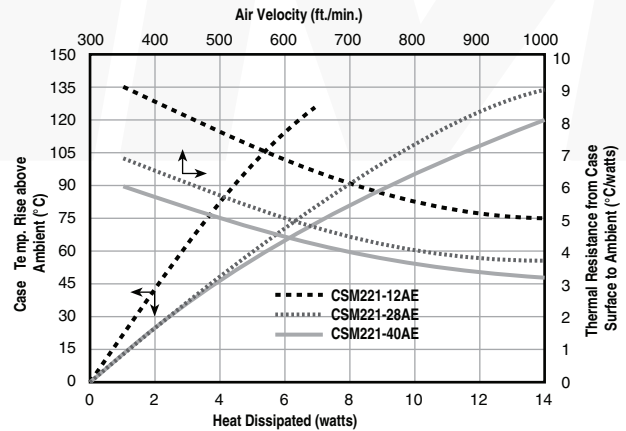
Heat dissipation is the total for ALL DEVICES attached to the heat sink

**Heat Sink** Aluminum Alloy 6063-T5 or Equivalent with either degreased or black anodized finish.

**Solder Foot** Cold-rolled Steel, surface tin plated.

**Interface Thermal Resistance** for improvement, use thermal joint compound, 0.005 Grafoil (TGon 800 by Laird), or phase change material (Hi-Flow by Bergquist)

**Insulator** (Optional) Sil-Pad 900-S, K6 800-S and K10 by Bergquist



(continued)

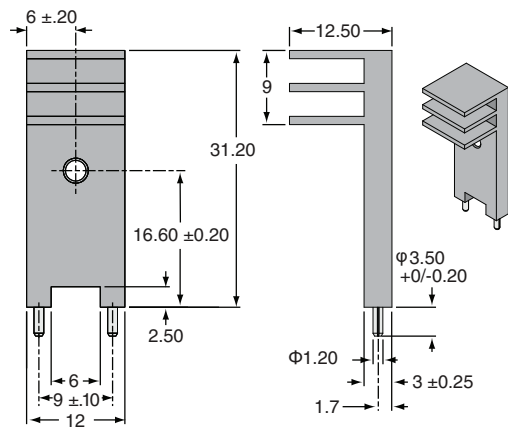
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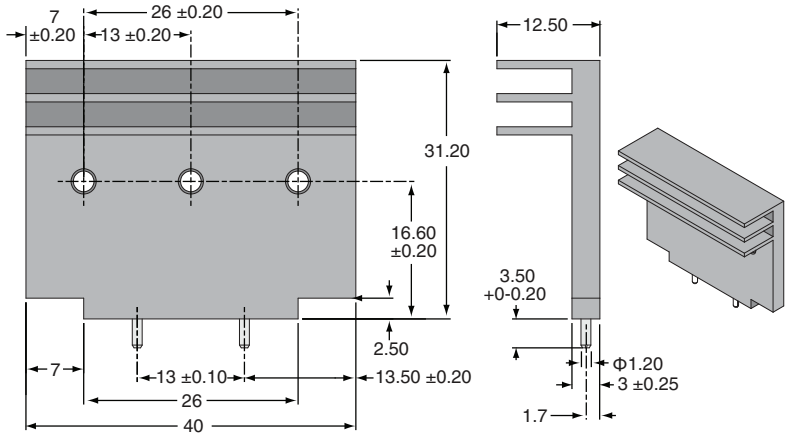
### DIMENSIONS

Dimensions mm; M3\*0.5P thread Tapping. JIS-2b standard chamfer 0.3m

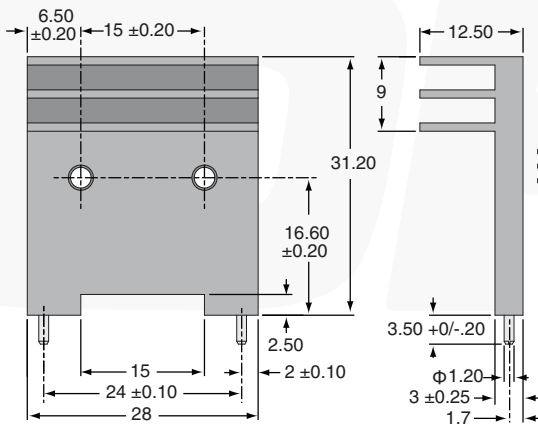
**CSM221-12AE**



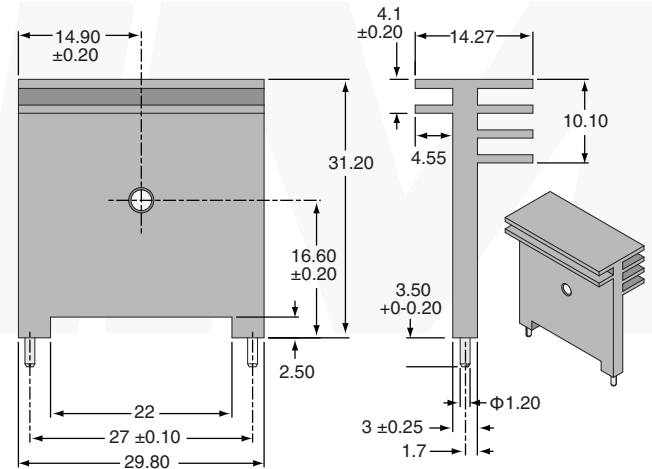
**CSM221-40AE**



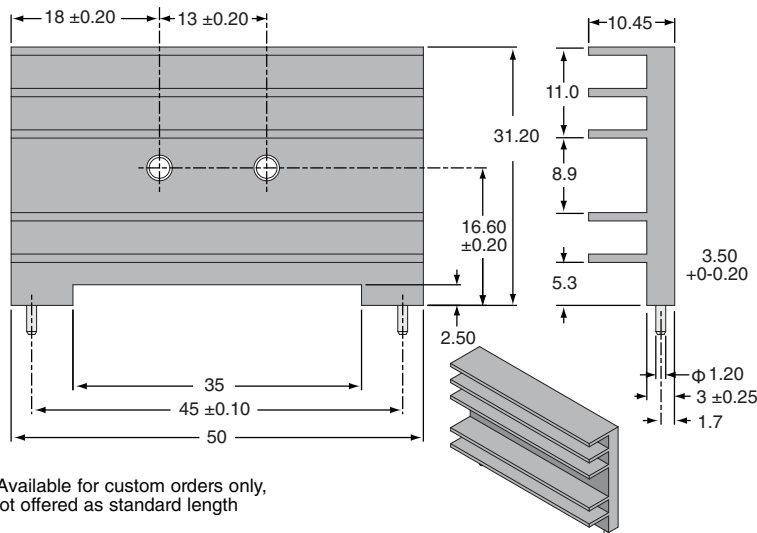
**CSM221-28AE**



**CSM222-30AE**



**CSM223-50AE\***



\*Available for custom orders only, not offered as standard length

### ORDERING INFORMATION

RoHS Compliant  
**C S M 2 2 1 - 1 2 A E**  
 Series      Extrusion type      Extrusion width      Black anodized