# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

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## **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.

#### SERIES SPECIFICATIONS

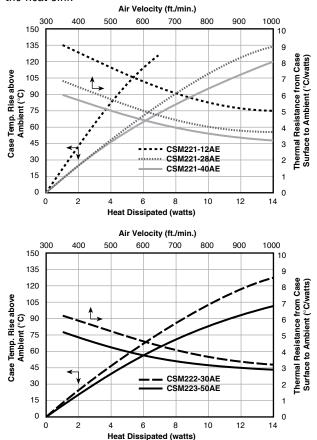
Heatsink Part Number	Surface Area (in² / mm²)	Weight (oz / g)	Length L (mm)	Thermal Res.* (°C/W)
CSM221-12AE	1.84 / 1,188	0.13/ 3.7	12	18.0
CSM221-28AE	4.30 / 2,772	0.3 / 8.5	28	12.8
CSM221-40AE	6.14 / 3,960	0.43 / 12.2	40	12.1
CSM222-30AE	6.25 / 4,029	0.5 / 14.2	30	11.3
CSM223-50AE	10.30 / 6,645	0.6 / 17.0	50	9.8

\*Free convection at 10 watts dissipation

#### CHARACTERISTICS

#### **Heat Dissipation**

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



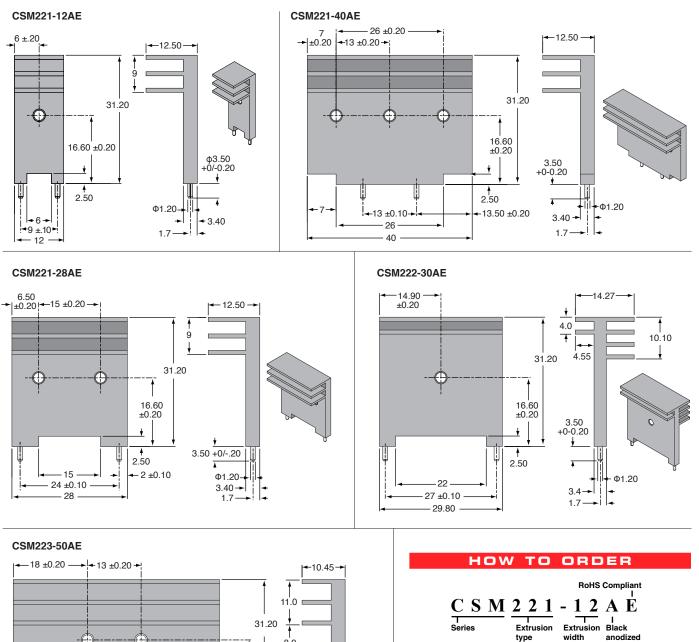
Heat Sink	Aluminum Alloy 6063-T5 or Equivalent with either degreased or black anodized finish.
Solder Foot	Cold-rolled Steel, surface tin plated.
Thermal	for improvement, use thermal joint com- pound, 0.005 Grafoil (TGon 800 by Laird), or phase change material (Hi-Flow by Bergquist)
Insulator	(Optional) Sil-Pad 900-S, K6 800-S and K10 by Bergquist

## **CSM** Series

### **Board Mount Heat Sink For TO-220 Devices**

#### DIMENSIONS

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



35

45 ±0.10 50

89 ł

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5.3 4

3.50 +0-0.20

Φ1.20

•|| ► 3.40 ► 1.7

16.60 ±0.20

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2.50

type

