

CR Series

Heatsink with universal cam-clip



Ohmite introduces the CR-series, configurable and patented (Pat. Pending) high performance, heatsinks with universal cam-clip for TO-247, TO-264, and other packages. This proprietary heat sink provides tool and fixture free assembly operation with its Pat Pending cam clip system. The CR series heatsinks are comparable to some AAVID popular MAX-clip heat sinks in footprint and thermal performance. It is the ideal type of heat sink for high power density and small size electronic packaging with forced convection cooling.

FEATURES

- **Minimum assembly cost and labor:** Spring Clips make the mounting holes, fasteners, tools and fixtures obsolete in assembly operations & reduce costs.
- **Maximum Repeatability:** Constant spring force over repeated assembly/disassembly
- **Maximum Reliability:** Resilient spring action locks electronic component in place. Fewer parts in assembly and no fasteners and washers required. Prevent short circuit by eliminating metal particles generated from hardware or thread tapping
- **Design Flexibility:** Maximum flexibility for dynamic device locations and power up grading. "Configure-to-Fit" gives designers total freedom to configure heat sink needed to fit their dynamic design environments.

SERIES SPECIFICATIONS

| Heatsink Part Number | Surface Area (in ² /mm ²) | Weight (oz/g) | Length (mm) | Thermal Resistance* (°C/W) |
|----------------------|--|---------------|-------------|----------------------------|
| CR101-25 | 20 / 12,785 | 1.0 / 28 | 25 | 7.6 |
| CR101-50 | 40 / 25,570 | 2.0 / 57 | 50 | 5.3 |
| CR101-75 | 60 / 38,355 | 3.0 / 85 | 75 | 4.2 |
| CR201-25 | 36.8 / 23,705 | 1.8 / 52 | 25 | 4.7 |
| CR201-50 | 73.5 / 47,409 | 3.6 / 103 | 50 | 3.3 |
| CR201-75 | 110 / 71,114 | 5.4 / 155 | 75 | 2.6 |
| CR301-25 | 19.5 / 12,595 | 1.38 / 39 | 25 | 8.1 |
| CR301-50 | 39.0 / 25,189 | 2.75 / 78 | 50 | 5.7 |
| CR301-75 | 58.5 / 37,784 | 4.12/117 | 75 | 4.5 |
| CR401-25 | 31.7 / 20,477 | 2.26/63.5 | 25 | 5.4 |
| CR401-50 | 63.5 / 40,954 | 4.48/127 | 50 | 3.8 |
| CR401-75 | 95.2 / 61,431 | 6.74/191 | 75 | 3.0 |

*Natural convection thermal resistance based on 70 °C Temp rise above ambient.

HOW TO ORDER



CHARACTERISTICS

| | |
|--------------------|--|
| Heat Sink | Aluminum Alloy 6063-T5 or Equivalent with either degreased or black anodized finish. |
| Spring Clip | Music Wire, Per ASTM A228 with bright nickel plating |
| Solder Foot | Cold-rolled Steel, Per ASTM A-366 with pure tin over copper strike. RoHS compliant. |
| Insulator | (Optional) Sil-Pad 900-S, K6 800-S and K10 |

Thermal Performance



Two TO-247 heat sources uniformly spaced on the heat Sink, L= 1.97" [50mm] and total of 10W Power Dissipation

(continued)

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DIMENSIONS



CR101



CR201



CR301



CR401



Clip