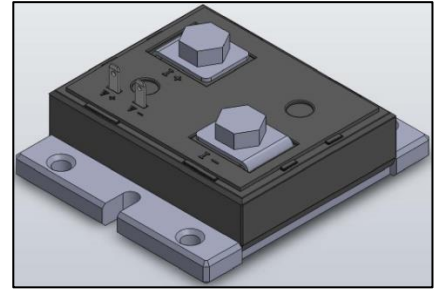


High Power Precision Shunt Resistor

- Up to 250W on heat sink
(Forced cooling , Terminal temp. & copper flange temp. $\leq +60\text{C}$)
- Max. current limit 387 A (At. $1\text{m}\Omega$)
- Excellent long term stability & short term stability
- Low temperature coefficient of resistance(TCR)
- High current sensing & reference resistors in laboratories.
- Charge – discharge test equipment for high capacity batteries
- Current sources & laboratory power supplies



GENERAL SPECIFICATIONS

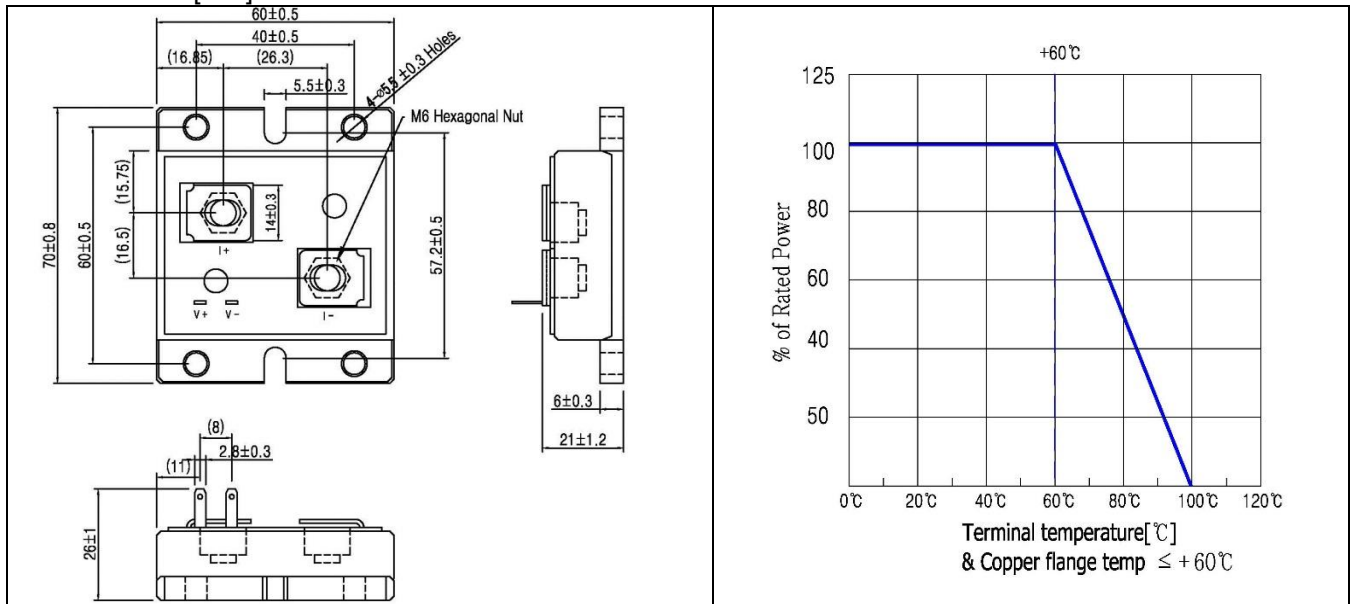
| Model | *Rated Power [W] | **Resistance value [$\text{m}\Omega$] | Tolerance [%] | Short term stability[%] |
|-------|------------------|---|---|---|
| HPS | 250 | 1, 2, 5, 10, 20, 50,100 | ± 0.05 (A), ± 0.1 (B) ± 0.5 (D), ± 1.0 (F) | $\leq \pm 0.02$ / $\leq \pm 0.03$ $\leq \pm 0.05$ / $\leq \pm 0.1$ |

*: Terminal temp.&copper flange temp. $\leq +60\text{C}$ **: The resistance values of 20/50/100 $\text{m}\Omega$ are under development

CHARACTERISTICS

| | |
|---------------------------------|---|
| Applicable temperature range | -55C ~ +100C |
| Rated power | 250[W] |
| Resistance values | 1,2,5,10,20,50,100 [$\text{m}\Omega$] |
| Tolerance | A($\pm 0.05\%$) / B($\pm 0.1\%$) / D($\pm 0.5\%$) / F ($\pm 1\%$) |
| Max. working current | 387A at $1\text{m}\Omega$ |
| Dielectric withstanding voltage | AC 500V for 1Min. (Max. leakage current 2m A) |
| TCR | Max. ± 5 [ppm/C] |
| Short term Stability | Current load for 1hour at terminal temp & copper flange temp. $\leq +60\text{C}$ $\Delta R \leq \pm 0.02\% / \leq \pm 0.03\% / \leq \pm 0.05\% / \leq \pm 0.1\%$ |
| Long Term Stability | $\leq \pm 0.2\%$ after 1,000 hours (Terminal temp $\leq +60\text{C}$ and copper flange. temp $\leq +60\text{C}$) |

DIMENSIONS[mm] & DERATING CURVE



ORDERING PROCEDURE

| | | | |
|------------|---|--|---|
| HPS | R0010 | A | 1K3 |
| # Model | # Resistance value ex) $1\text{m}\Omega$ | # Tolerance [%] A : $\pm 0.05\%$ / B : $\pm 0.1\%$ D : $\pm 0.5\%$ / F : $\pm 1.0\%$ | # TK [ppm/ $^{\circ}\text{C}$] 3 , 5 |