CUIINC

PART NUMBER: CPM-2F
DESCRIPTION: peltier cooling unit

CUl's patented CPM-2 series cooling modules incorporate peltier technology in a convenient package that maximizes heat absorption and reduces overall assembly cost. The CPM-2 is assembled with our high performance peltier device between two preci-sion-machined aluminum plates using thermally-conductive adhesive, leading to better heat transfer between the cooling and radiating surfaces. This module is perfect for applications such as refrigeration, lasers, dehumidifiers, NEMA enclosures, or any other electronic device that requires reliable, precision cooling.

specifications

| max input voltage ${ }^{1}$ | 12 V dc |
| :--- | :--- |
| max current | 6 A |
| max temp drop $(\Delta T m a x)$ | $\left.73 \mathrm{~K} \mathrm{(at} \mathrm{Th}=50^{\circ} \mathrm{C}\right)$ |
| max cooling power $(\mathrm{Qmax})$ | $46 \mathrm{~W}\left(\mathrm{at} \mathrm{Th}=\mathrm{Tc}=50^{\circ} \mathrm{C}\right)$ |
| dielectric strength | $1200 \mathrm{~V} \mathrm{ac}, 1 \mathrm{sec}$. |
| insulation resistance | $250 \mathrm{~V} \mathrm{dc},>10 \mathrm{M}$ ohm |
| internal resistance ${ }^{2}$ | $1.85 \sim 2.35 \mathrm{ohm}$ |
| cold plate temperature | $-20^{\circ} \mathrm{C} \sim+60^{\circ} \mathrm{C}$ |
| storage temperature | $-20^{\circ} \mathrm{C} \sim+70^{\circ} \mathrm{C}$ |
| operating temperature | $0^{\circ} \mathrm{C} \sim+35^{\circ} \mathrm{C}$ |
| storage humidity | $10 \sim 90 \%$ |
| operating humidity | $30 \sim 85 \%$ |
| weight | 200 g |
| cooling medium | aluminum plate |
| heat radiation medium | aluminum plate |

notes: 1. at inverse voltage "cold plate" becomes heat radiation plate
2. ambient temperature 25+/-1C, measured by 4 AC thermal method

## performance graphs





