



## RM20TA-24,-2H

HIGH VOLTAGE MEDIUM POWER GENERAL USE  
INSULATED TYPE

## ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter                           | Voltage class |      | Unit |
|--------|-------------------------------------|---------------|------|------|
|        |                                     | 24            | 2H   |      |
| VRRM   | Repetitive peak reverse voltage     | 1200          | 1600 | V    |
| VRSM   | Non-repetitive peak reverse voltage | 1350          | 1700 | V    |
| Ea     | Recommended AC input voltage        | 440           | 480  | V    |

| Symbol           | Parameter                              | Conditions   | Ratings               | Unit             |
|------------------|--|--|-----------------------|------------------|
| Io               | DC output current                      | Three-phase full wave rectifying circuit, Tc=100°C | 40                    | A                |
| IFSM             | Surge (non-repetitive) forward current | One half cycle at 60Hz, peak value                 | 400                   | A                |
| I <sup>2</sup> t | I <sup>2</sup> t for fusing            | Value for one cycle of surge current               | 6.7 × 10 <sup>2</sup> | A <sup>2</sup> s |
| f                | Maximum operating frequency            |  | 1000                  | Hz               |
| Tj               | Junction temperature                   |  | -40~+125              | °C               |
| Tstg             | Storage temperature                    |  | -40~+125              | °C               |
| Viso             | Isolation voltage                      | Charged part to case                               | 2500                  | V                |
| —                | Mounting torque                        | Mounting screw M6                                  | 1.96~2.94             | N·m              |
| —                |  |  | 20~30                 | kg·cm            |
| —                | Weight                                 | Typical value                                      | 190                   | g                |

## ELECTRICAL CHARACTERISTICS

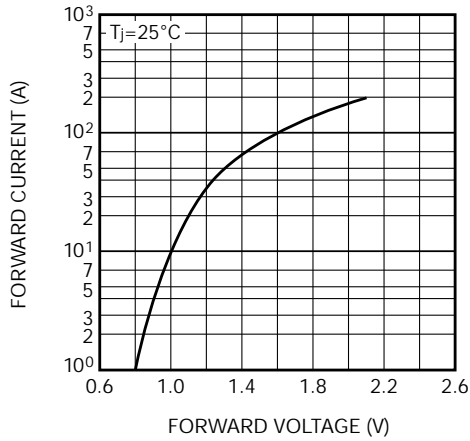
| Symbol               | Parameter                  | Test conditions   | Limits |      |      | Unit |
|----------------------|----------------------------|---|--------|------|------|------|
|                      |                            |   | Min.   | Typ. | Max. |      |
| I <sub>RRM</sub>     | Repetitive reverse current | T <sub>j</sub> =125°C, V <sub>RRM</sub> applied                 | —      | —    | 2.0  | mA   |
| V <sub>FM</sub>      | Forward voltage            | T <sub>j</sub> =25°C, I <sub>FM</sub> =40A, instantaneous meas. | —      | —    | 1.25 | V    |
| R <sub>th(j-c)</sub> | Thermal resistance         | Junction to case  | —      | —    | 0.24 | °C/W |
| R <sub>th(c-f)</sub> | Contact thermal resistance | Case to fin, conductive grease applied                          | —      | —    | 0.06 | °C/W |
| —                    | Insulation resistance      | Measured with a 500V megohmmeter between main terminal and case | 10     | —    | —    | MΩ   |

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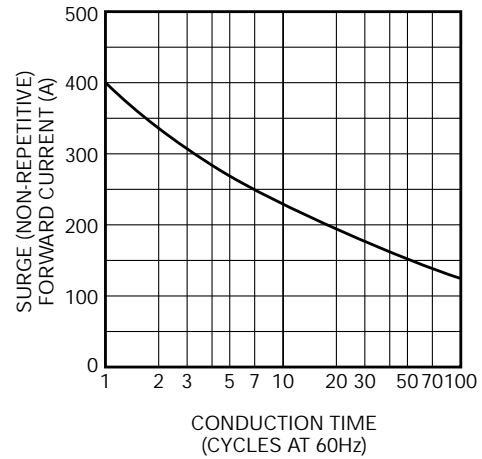
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## PERFORMANCE CURVES

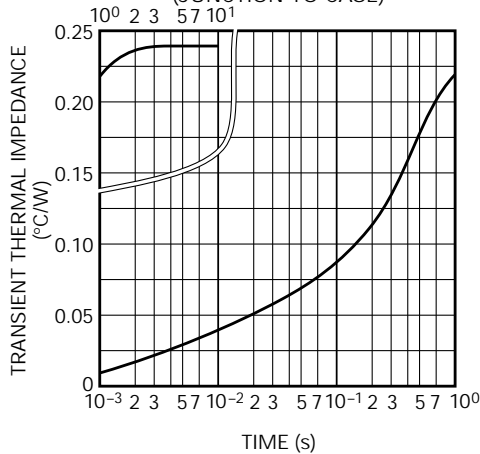
MAXIMUM FORWARD CHARACTERISTIC



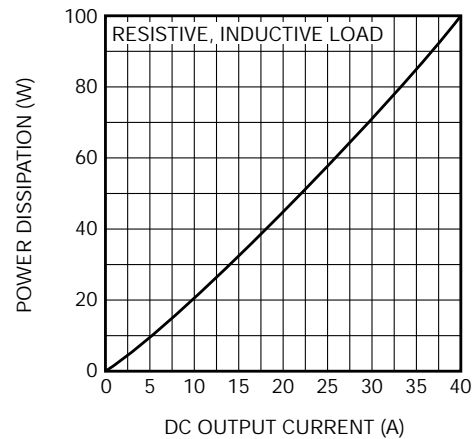
ALLOWABLE SURGE (NON-REPETITIVE) FORWARD CURRENT



MAXIMUM TRANSIENT THERMAL IMPEDANCE (JUNCTION TO CASE)



MAXIMUM POWER DISSIPATION



ALLOWABLE CASE TEMPERATURE VS. DC OUTPUT CURRENT

