

# RM35HG-34S

HIGH SPEED SWITCHING USE  
NON-INSULATED TYPE

RM35HG-34S



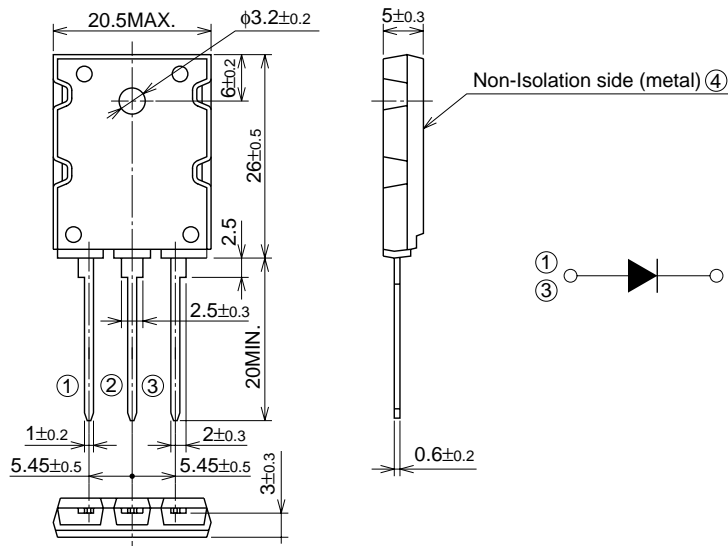
- **Idc** DC current ..... **35A**
- **VRRM** Repetitive peak reverse voltage  
..... **1700V**
- **trr** Reverse recovery time ..... **0.3μs**
- **ONE ARM**
- **Non-Insulated Type**

## APPLICATION

For snubber circuit (IPM or IGBT module)

## OUTLINE DRAWING & CIRCUIT DIAGRAM

Dimensions in mm



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## ABSOLUTE MAXIMUM RATINGS (T<sub>j</sub>=25°C)

| Symbol              | Parameter                           | Voltage class |      | Unit |
|---------------------|-------------------------------------|---------------|------|------|
|                     |                                     |               | 34   |      |
| V <sub>RRM</sub>    | Repetitive peak reverse voltage     |               | 1700 | V    |
| V <sub>DRM</sub>    | Non-repetitive peak reverse voltage |               | 1700 | V    |
| V <sub>R (DC)</sub> | Reverse DC voltage                  |               | 1360 | V    |

| Symbol           | Parameter                              | Conditions   | Ratings   | Unit |
|------------------|--|--|-----------|------|
| I <sub>DC</sub>  | DC current                             | Resistive load, T <sub>c</sub> =80°C ①, ③ Collective of terminal | 35        | A    |
| I <sub>FSM</sub> | Surge (non-repetitive) forward current | One half cycle at 60Hz, peak value ①, ③ Collective of terminal   | 400       | A    |
| T <sub>j</sub>   | Junction temperature                   |  | -40~+150  | °C   |
| T <sub>stg</sub> | Storage temperature                    |  | -40~+125  | °C   |
| V <sub>iso</sub> | Isolation voltage                      | Charged part to case   | —         | V    |
| —                | Mounting torque                        | Mounting screw M3  | 0.59~0.98 | N·m  |
| —                | Weight                                 | Typical value  | 10        | g    |

## ELECTRICAL CHARACTERISTICS

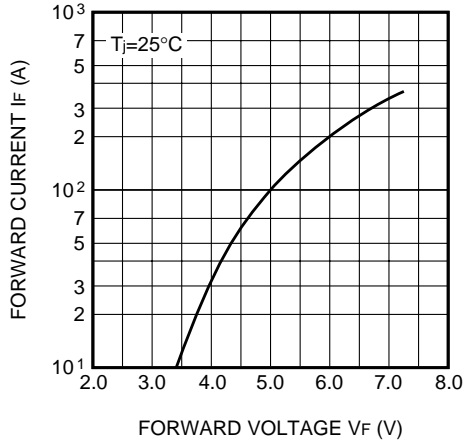
| Symbol                | Parameter                  | Test conditions   | Limits |      |         | Unit |
|-----------------------|----------------------------|---|--------|------|---------|------|
|                       |                            |   | Min.   | Typ. | Max.    |      |
| I <sub>RRM</sub>      | Repetitive reverse current | T <sub>j</sub> =25/125°C, V <sub>RRM</sub> applied                                | —      | —    | 0.1/1.0 | mA   |
| V <sub>FM</sub>       | Forward voltage            | T <sub>j</sub> =25°C, I <sub>FM</sub> =100A, Instantaneous meas.                  | —      | —    | 5.0     | V    |
| t <sub>rr</sub>       | Reverse recovery time      | I <sub>FM</sub> =100A, T <sub>j</sub> =25°C, di/dt=-500A/μs, V <sub>R</sub> =600V | —      | —    | 0.3     | μs   |
| Q <sub>rr</sub>       | Reverse recovery charge    |   | —      | —    | —       | μC   |
| R <sub>th (j-c)</sub> | Thermal resistance         | Junction to case  | —      | —    | 0.5     | °C/W |
| R <sub>th (c-f)</sub> | Contact thermal resistance | Case to fin, conductive grease applied  | —      | —    | 0.5     | °C/W |

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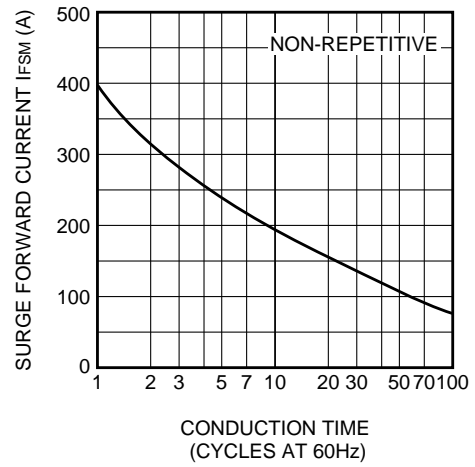
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## PERFORMANCE CURVES

MAXIMUM FORWARD CHARACTERISTIC



RATED SURGE FORWARD CURRENT



MAXIMUM TRANSIENT THERMAL IMPEDANCE

