

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes**

**FEATURES**

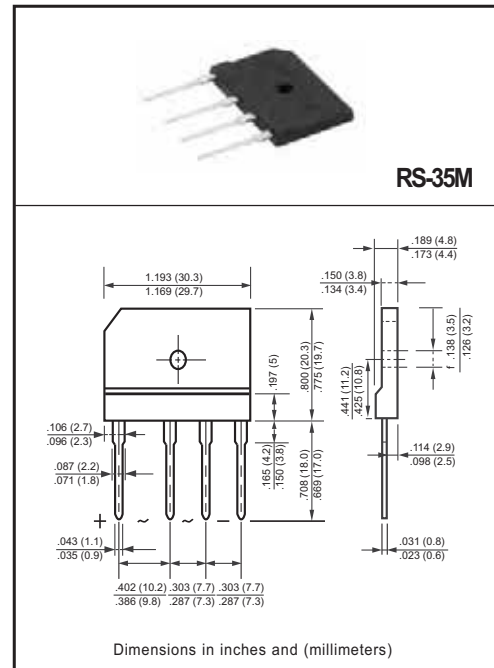
- \* Low leakage
- \* Low forward voltage
- \* Surge overload rating : 400 amperes peak
- \* Mounting position: Any
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O
- \* UL list the recognized component directory, file #E252754

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

| RATINGS                                                                                           | SYMBOL                            | RS3501M      | RS3502M | RS3503M | RS3504M | RS3505M | RS3506M | RS3507M | UNITS             |
|---------------------------------------------------------------------------------------------------|-----------------------------------|--------------|---------|---------|---------|---------|---------|---------|-------------------|
| Maximum Recurrent Peak Reverse Voltage                                                            | V <sub>RRM</sub>                  | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts             |
| Maximum RMS Voltage                                                                               | V <sub>RMS</sub>                  | 35           | 70      | 140     | 280     | 420     | 560     | 700     | Volts             |
| Maximum DC Blocking Voltage                                                                       | V <sub>DC</sub>                   | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts             |
| Maximum RSM Blocking Voltage                                                                      | V <sub>RSM</sub>                  | 150          | 200     | 300     | 500     | 700     | 900     | 1100    | Volts             |
| Maximum Average Forward Rectified Current                                                         | I <sub>O</sub>                    | 35           |         |         |         |         |         |         | Amps              |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                  | 400          |         |         |         |         |         |         | Amps              |
| Typical Current Squared Time                                                                      | i <sup>2</sup> <sub>t</sub>       | 664          |         |         |         |         |         |         | A <sup>2</sup> /S |
| Insulation voltage                                                                                | V <sub>iso</sub>                  | 3000         |         |         |         |         |         |         | Volts             |
| Typical Thermal Resistance (Note 1)                                                               | R <sub>θJL</sub>                  | 1.0          |         |         |         |         |         |         | °C/W              |
|                                                                                                   | R <sub>θJA</sub>                  | 22           |         |         |         |         |         |         |                   |
| Operating and Storage Temperature Range                                                           | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 |         |         |         |         |         |         | °C                |

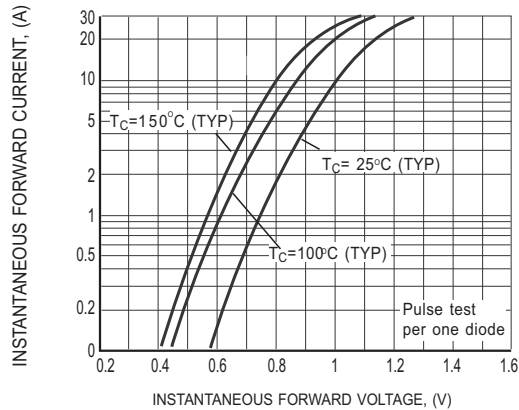
**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

| CHARACTERISTICS                                            |                         | SYMBOL         | RS3501M | RS3502M | RS3503M | RS3504M | RS3505M | RS3506M | RS3507M | UNITS |
|------------------------------------------------------------|-------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 17.5A DC          |                         | V <sub>F</sub> | 1.0     |         |         |         |         |         |         | Volts |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage | @T <sub>A</sub> = 25°C  | I <sub>R</sub> | 0.5     |         |         |         |         |         |         | uAmps |
|                                                            | @T <sub>A</sub> = 150°C |                | 500     |         |         |         |         |         |         | uAmps |

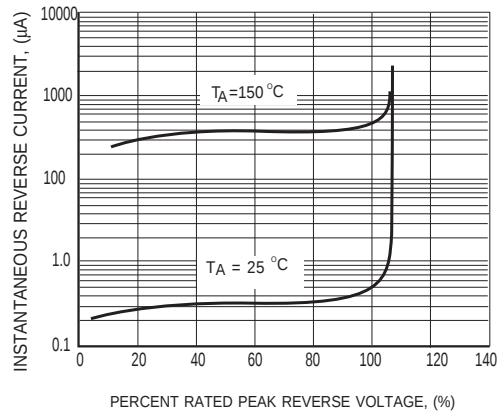
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "ROHS compliant".

2019-06  
REV: J

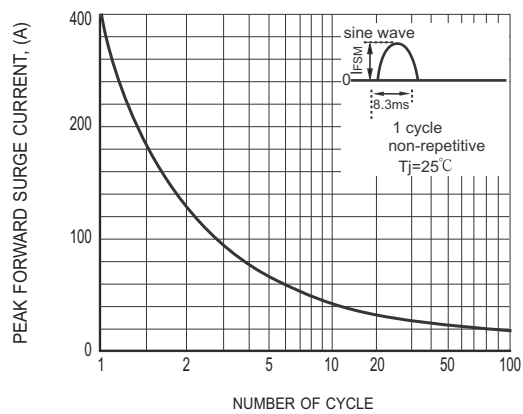
## RATING AND CHARACTERISTICS CURVES ( RS3501M THRU RS3507M )



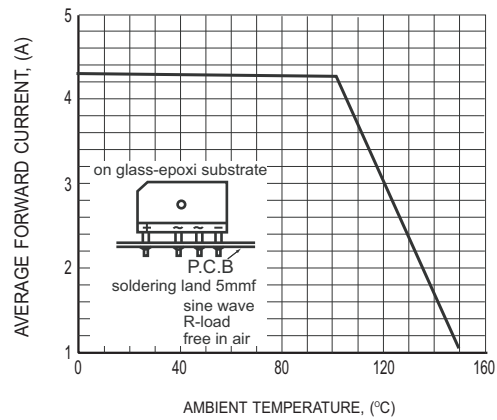
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



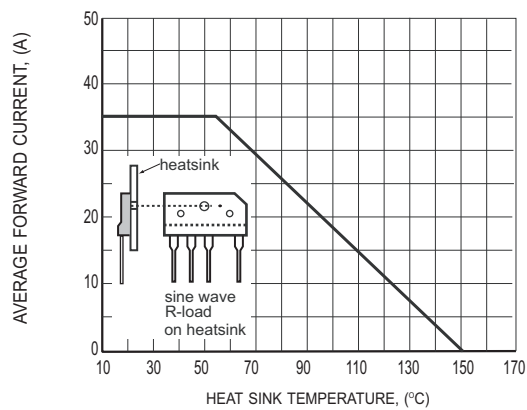
**FIG.2 MAXIMUM REVERSE CHARACTERISTICS**



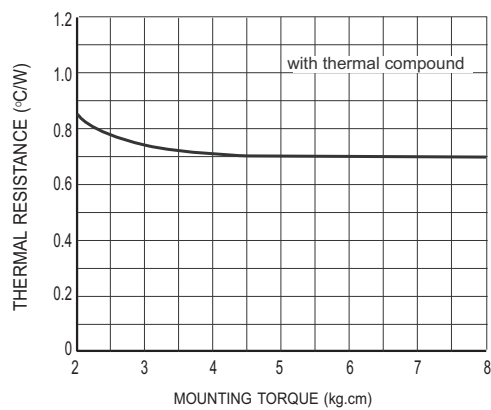
**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE**

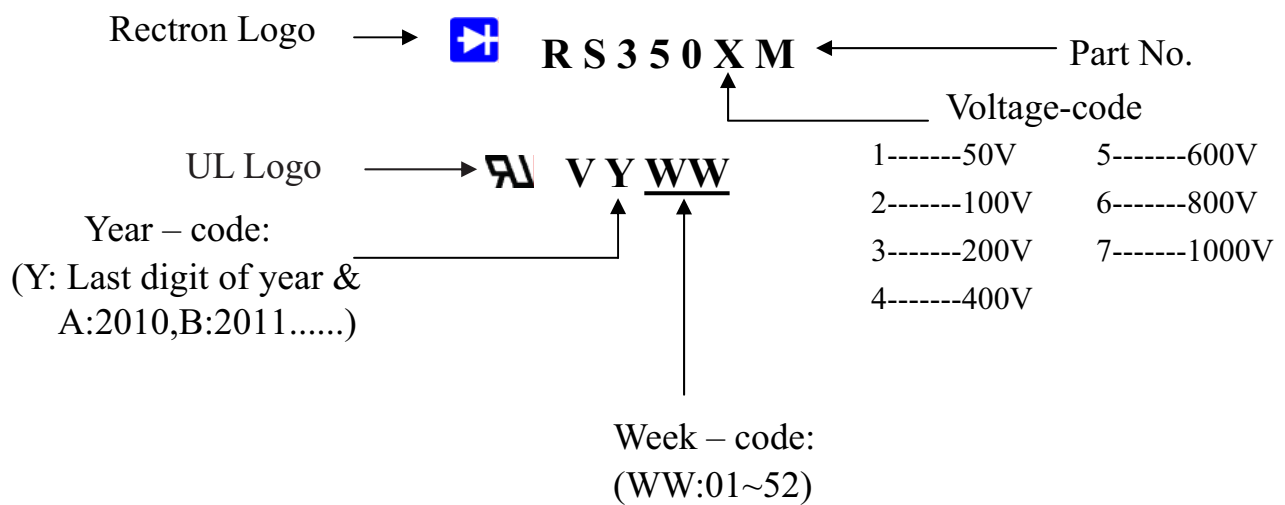


**FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.6 CONTACT THERMAL RESISTANCE for**

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### TUBE PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE<br>(mm) | CARTON SIZE<br>(mm) | EA PER CARTON | WEIGHT(Kg) |
|---------|--------------|------------|------------------------|---------------------|---------------|------------|
| RS-35M  | -C           | 600        | 490*135*110            | 510*293*131         | 1,200         | 13.12      |



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