

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE 600 to 1000 Volts CURRENT 35 Amperes**

**FEATURES**

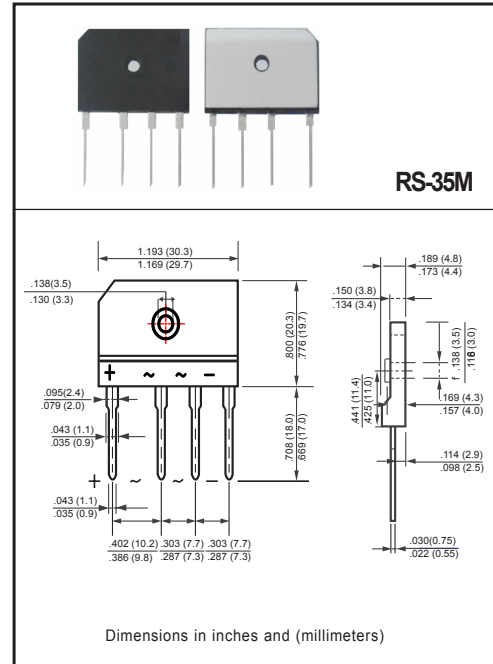
- \* Low leakage
- \* Low forward voltage
- \* Surge overload rating : 400 amperes peak
- \* Mounting position: Any
- \* Ideal for printed circuit boards
- \* High forward surge current capability
- \* Superior thermal conductivity

**MECHANICAL DATA**

- \* Case:Molded plastic case
- \* Weight:About 6.7grams

**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	RS3505MH	RS3506MH	RS3507MH	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> = 85°C	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>	660			A <sup>2</sup> /S
Insulation voltage	V <sub>iso</sub>	2500			Volts
Maximum thermal resistance per leg (Note 1)	R <sub>θJC</sub>	0.8			°C/W
Maximum thermal resistance per leg (Note 2)	R <sub>θJA</sub>	18			
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	RS3505MH	RS3506MH	RS3507MH	UNITS
Maximum Instantaneous Forward Voltage at 17.5A DC		V <sub>F</sub>	1.1			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	I <sub>R</sub>	5.0			uAmps
	@T <sub>A</sub> = 125°C		500			

NOTES : 1.Junction to case with heatsink.  
2.Junction to ambient without heatsink.

2024-07  
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RATING AND CHARACTERISTICS CURVES ( RS3505MH THRU RS3507MH )

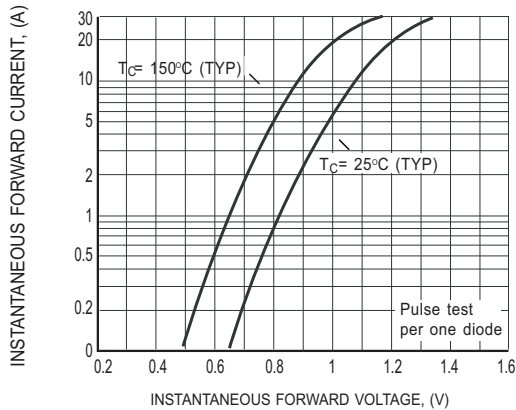


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

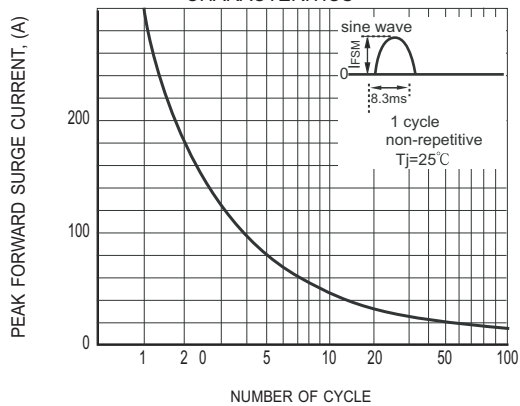


FIG.3 SURGE FORWARD CURRENT CAPABILITY

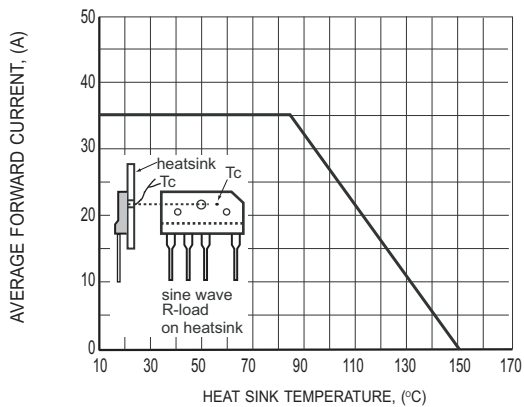


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

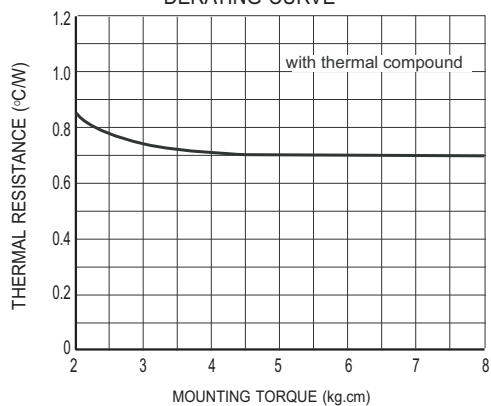
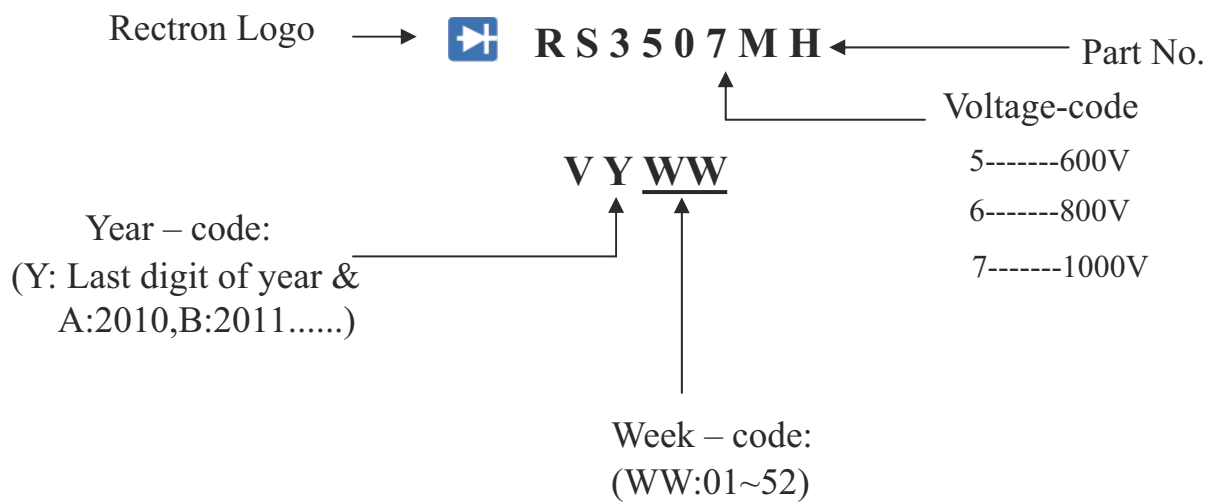


FIG.4 CONTACT THERMAL RESISTANCE fcf

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### TUBE PACK

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

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