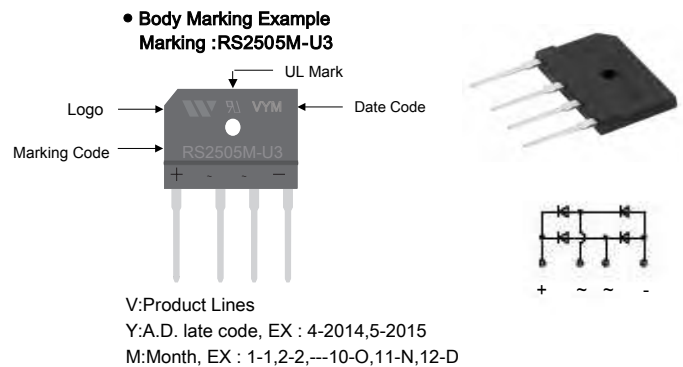


25A GLASS PASSIVATED ULTRA LOW VF BRIDGE RECTIFIERS - 600V

PRIMARY CHARACTERISTICS	
V_{RRM}	600V
$I_{(AV)}$	25.0A
V_F	0.92V
I^2t	508A ² s
$T_{J,Max}$	150°C

FEATURES

- Rating to 600V PRV
- Ideal for printed circuit board
- Low forward voltage drop,high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Moisture Sensitivity Level 1

RS-6M PACKAGE

MECHANICAL DATA

- Case : Molded plastic,RS-6M
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	RS2505M-U3	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward @ $T_C=100^\circ\text{C}$ (with heatsink) Rectified Current @ $T_a=25^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	25.0 4.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	350	A
Maximum Forward Voltage at 12.5A DC	V_F	0.92	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10.0 500	μA
I^2t Rating for Fusing ($t<8.3\text{ms}$)	I^2t	508	A ² s
Typical Thermal Resistance Junction to ambient.without heatsink	$R_{\theta JA}$	22	$^\circ\text{C/W}$
Typical Thermal Resistance Junction to case,with heatsink	$R_{\theta JC}$	1.0	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.



Characteristic Curve

Fig.1: Current Derating Curve

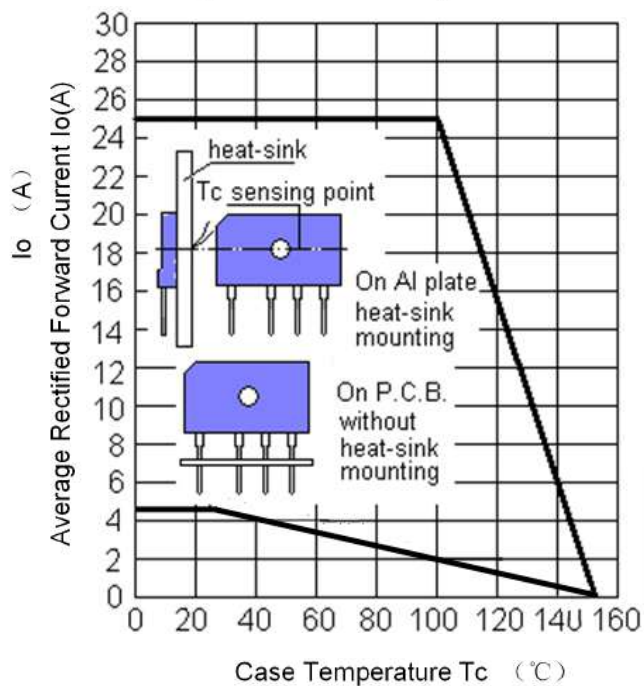


Fig.2 Typical Reverse Characteristics

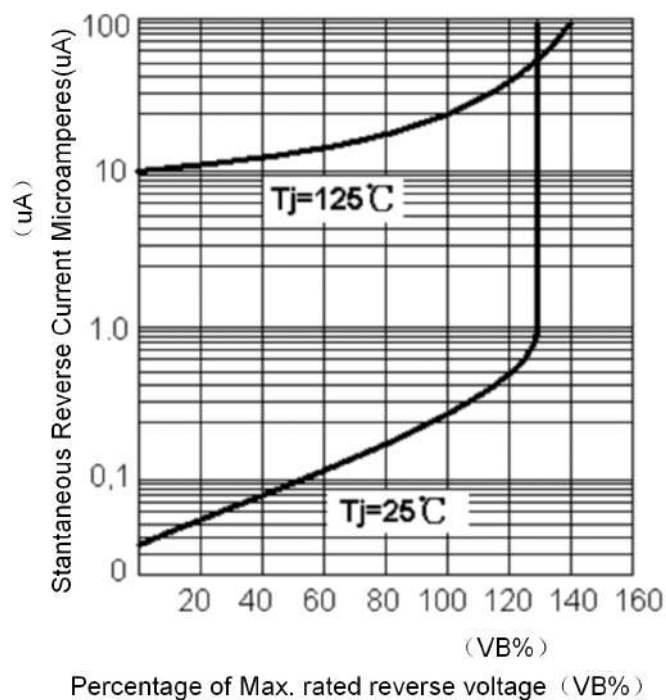


Fig.3: Max. Surge Current

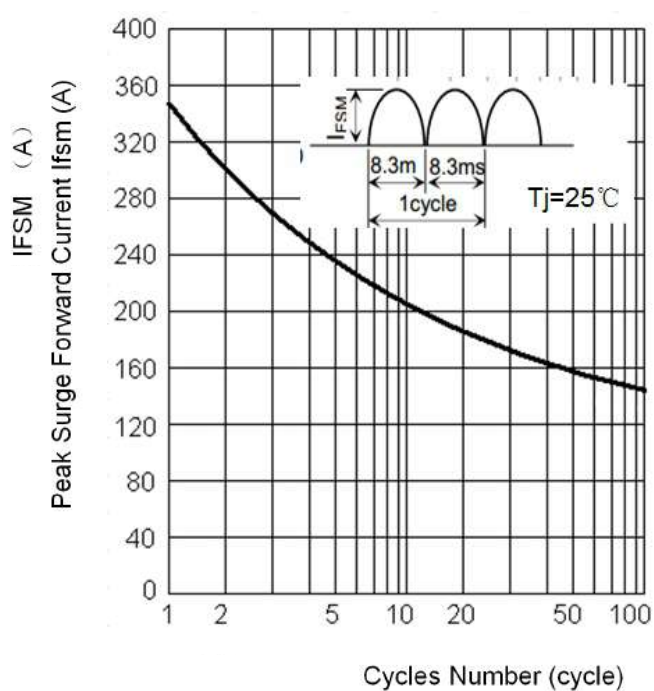
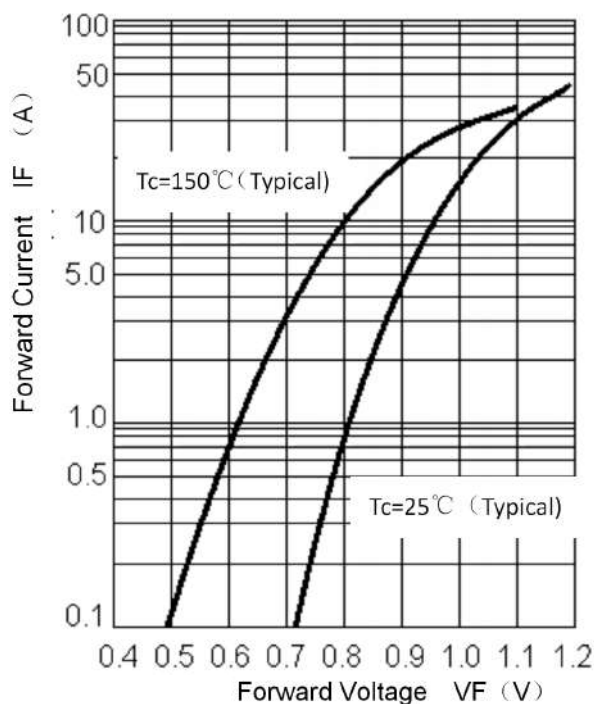


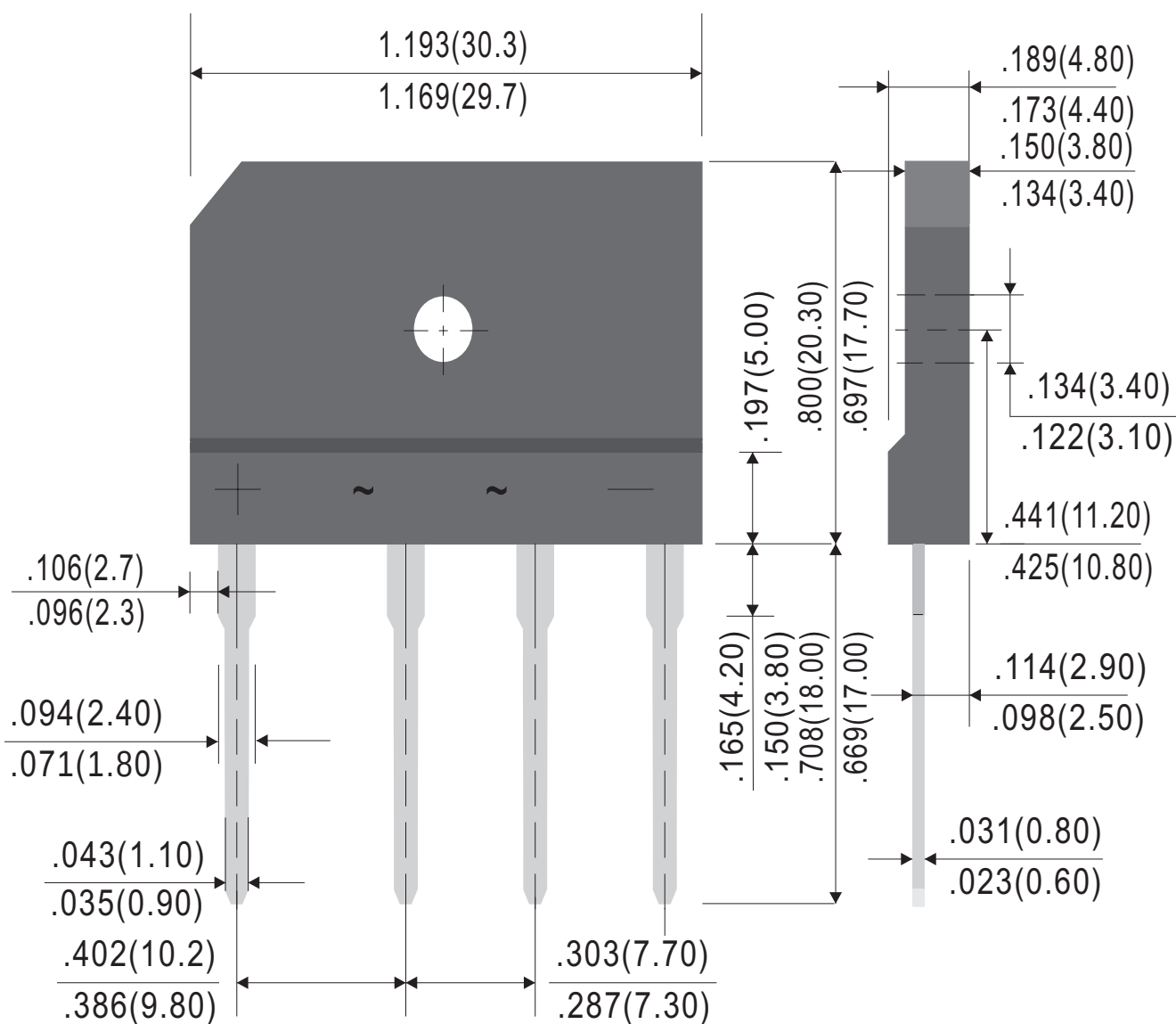
Fig.4: Rated Forward Features





Outline Drawing

RS-6M



Dimensions in inches and (millimeters)

Rev.B

**Ordering Information:**

Device PN	Packing
RS2505M-U3 -B ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Bulk Packing: 200 pcs/Box

Note: (1) Packing code, B: Bulk Packing.

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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