WILLAS

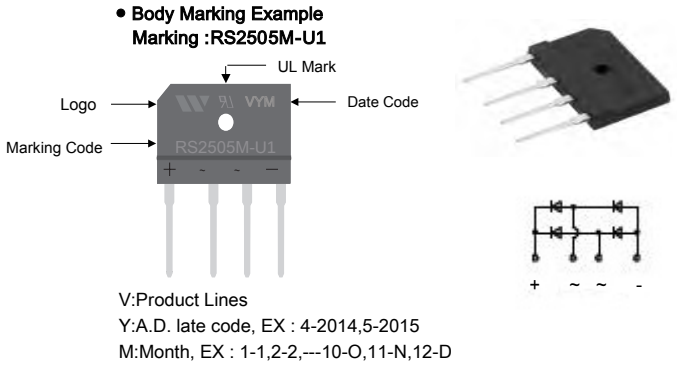
RoHS COMPLIANT

RS2505M-U1

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^2s
$T_{J,Max}$	150℃

RS-6M PACKAGE



V:Product Lines
Y:A.D. late code, EX : 4-2014,5-2015
M:Month, EX : 1-1,2-2,---10-O,11-N,12-D

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

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℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	RS2505M-U1	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 (with heatsink Note 2) Rectified Current @ T_C=100℃ (without heatsink)	$I_{(AV)}$	25.0 4.2	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_J=25℃ at Rated DC Blocking Voltage @ T_J=125℃	I_R	10.0 500	μA
I^2t Rating for Fusing (t<8.3ms)	I^2t	508	A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	85	pF
Typical Thermal Resistance	$R_{\theta JC}$	0.6	℃/W
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

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.

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FIG.1-FORWARD CURRENT DERATING CURVE

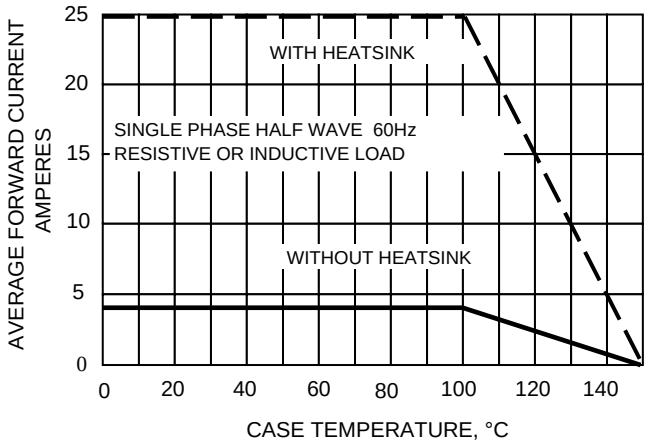


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

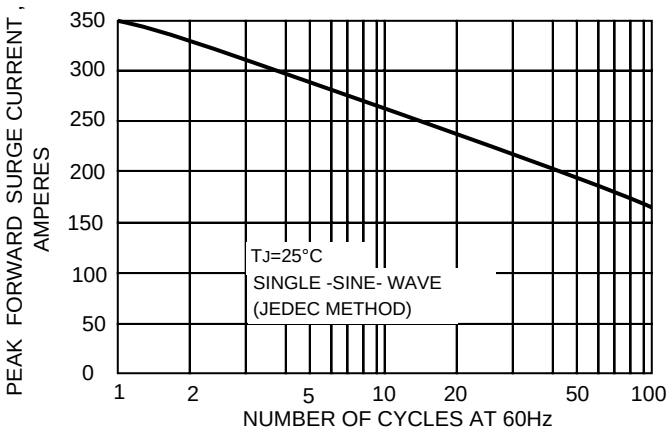


FIG.3-TYPICAL JUNCTION CAPACITANCE

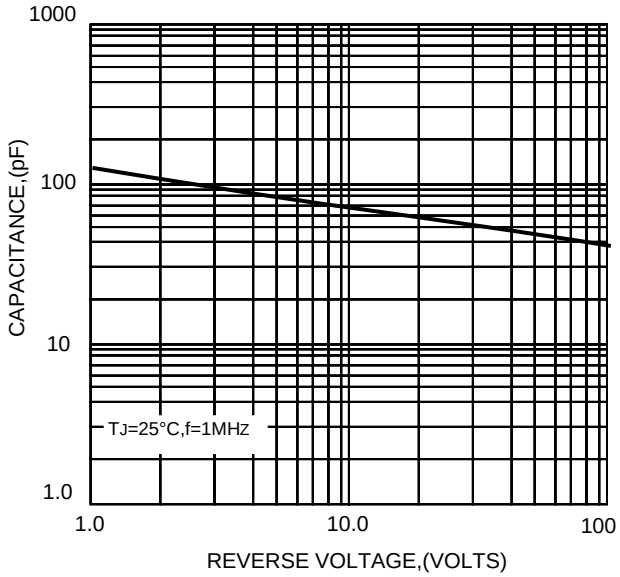


FIG.4-TYPICAL FORWARD CHARACTERISTICS

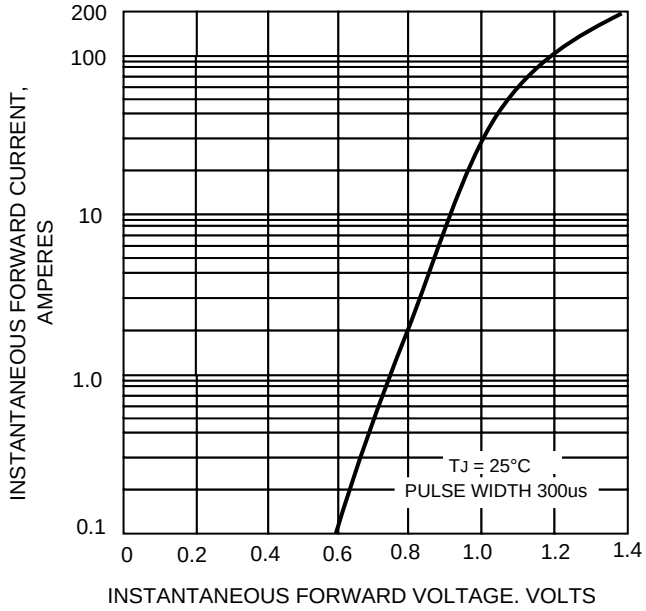
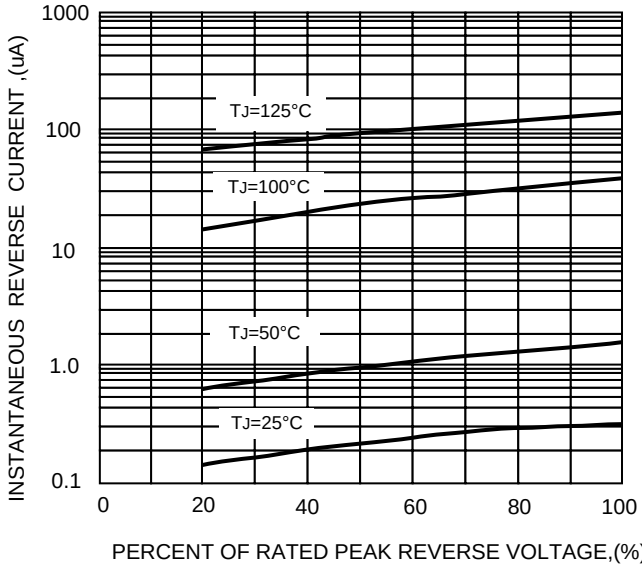


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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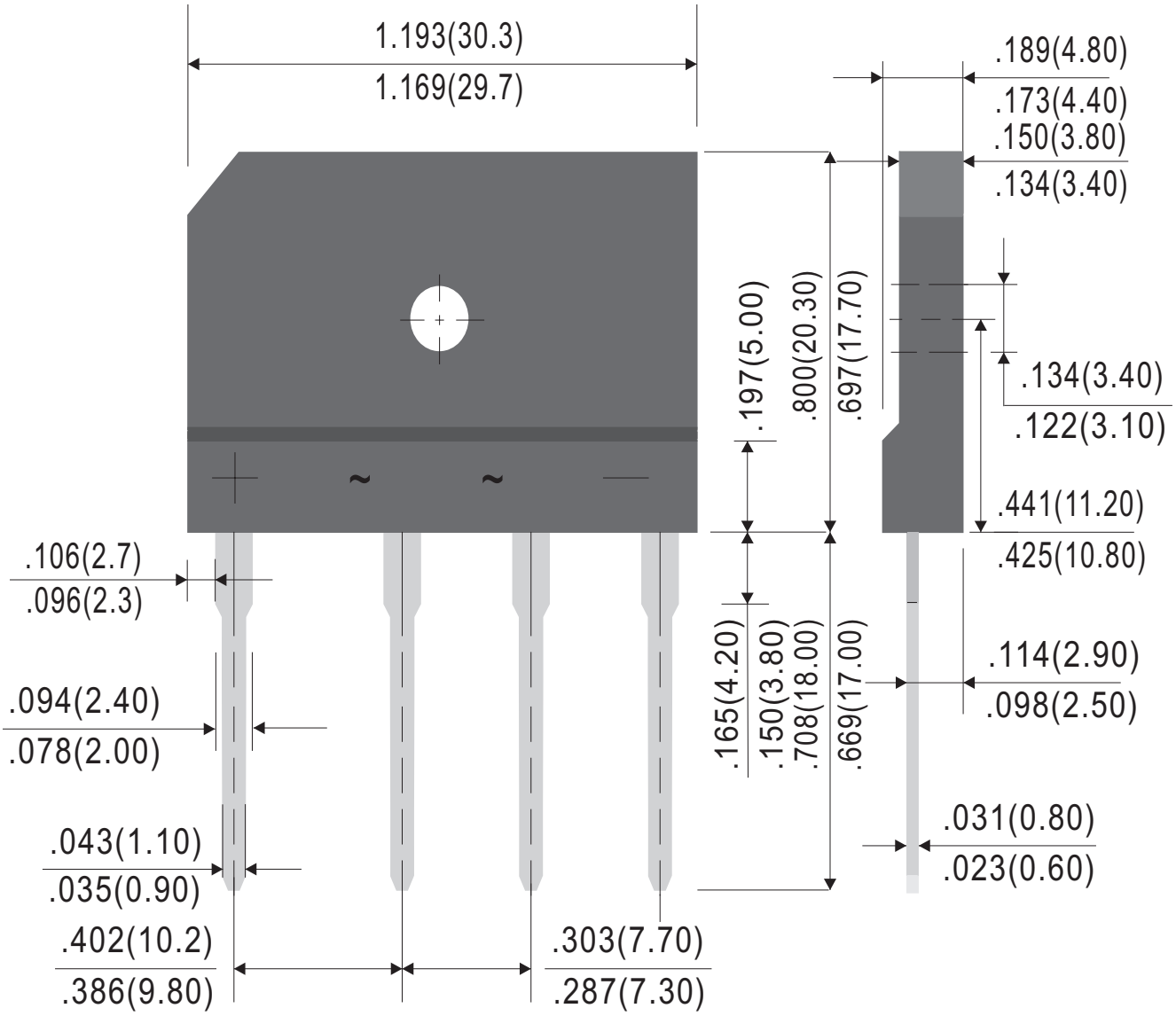
Outline Drawing

RS-6M



Dimensions in inches and (millimeters)

Rev.B

Ordering Information:

Device PN	Packing
RS2505M-¦M(1)G(2)-WS	Tube Packing:15pcs/Tube; 600pcs/Box

Note: 1. Packing code: Empty is Tube Packing

2. RoHS product for packing code suffix ”G”, Halogen free product for packing code suffix "H" .