

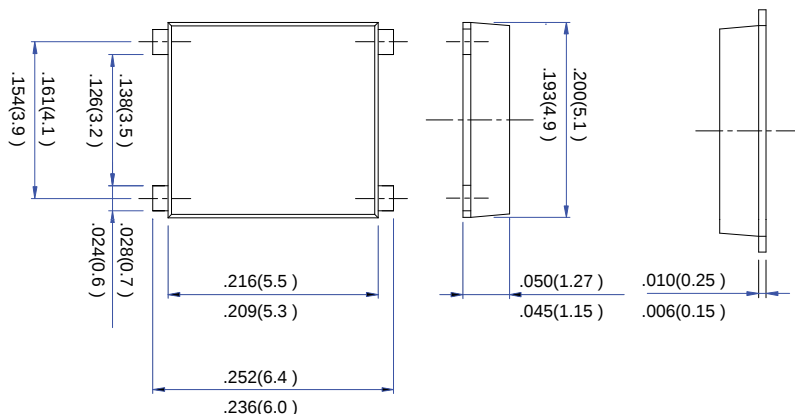
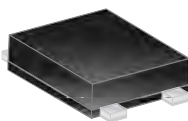


1.0 AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS MD-F PACKAGE

MD1F
THRU
MD7F

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper



MECHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Epoxy: Device has UL flammability classification 94V-0
- Polarity: Polarity symbol marked on body

Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MD1F	MD2F	MD3F	MD4F	MD5F	MD6F	MD7F	UNIT
Marking Code		MD1F	MD2F	MD3F	MD4F	MD5F	MD6F	MD7F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at $T_A=40^{\circ}\text{C}$ (Note 1)	I_F	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A
Current squared time $t < 8.3\text{ms}$, $T_A = 25^{\circ}\text{C}$	$I^2 t$	3.75							A^2s
Maximum Forward Voltage Drop Per Bridge Element at 1A Peak	V_F	1.1							V
Maximum DC Reverse Current @ $T_J=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_J=125^{\circ}\text{C}$	I_R	5 500							μA mA
Typical Junction Capacitance Per Element (Note1)	CJ	30.0							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	75.0							$^{\circ}\text{C} / \text{W}$
	$R_{\theta JC}$	45.0							$^{\circ}\text{C} / \text{W}$
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 at1.0MHz and applied reverse voltage of 4.0V DC.
- 2.Thermal resistance junction to ambient and junction to case



1.0 AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS MD-F PACKAGE

FIG.1-FORWARD CURRENT DERATING CURVE

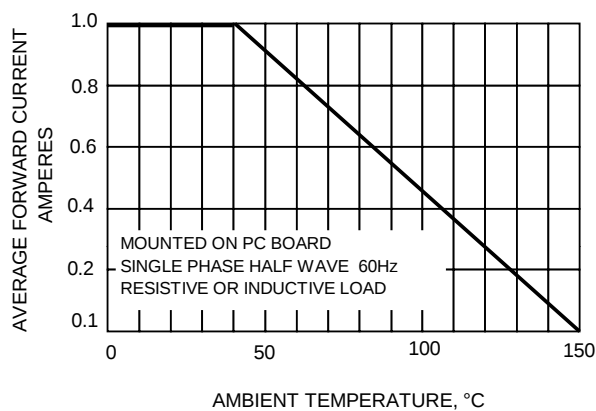


FIG.2-MXIMUM NON-REPETITIVE
SURGE CURRENT

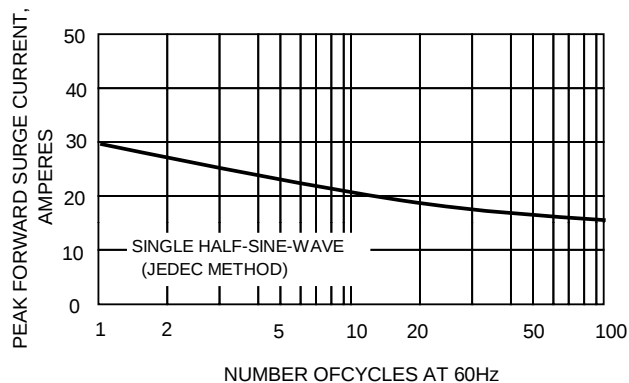


FIG.3-TYPICAL JUNCTION CAPACITANCE

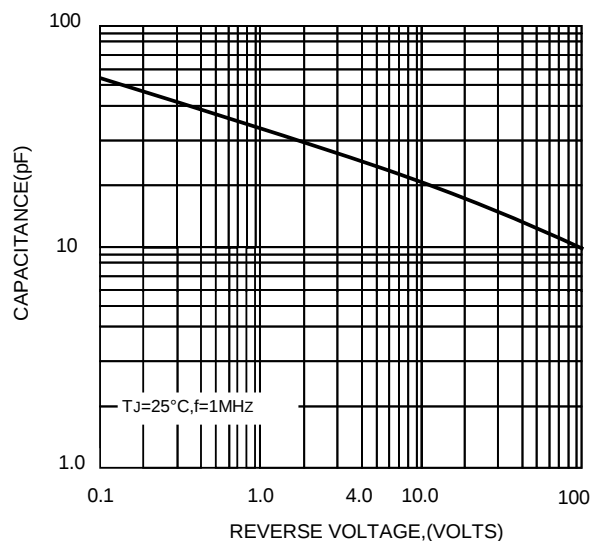


FIG.4-TYPICAL FORWARD CHARACTERISTICS

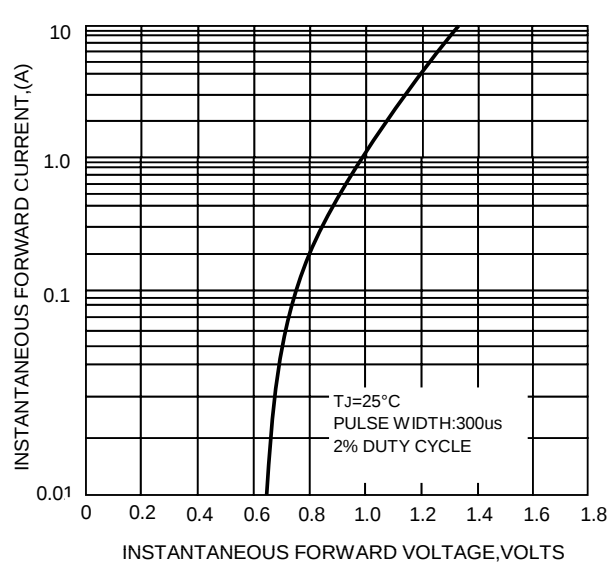
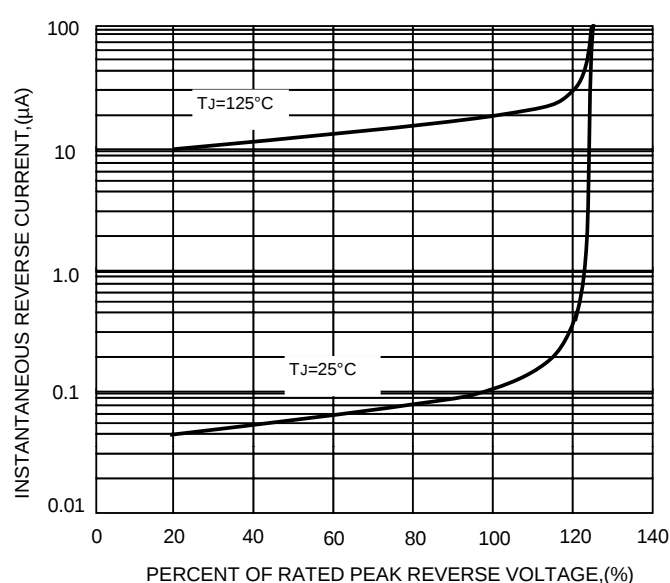


FIG.5-TYPICAL REVERSE CHARACTERISTICS





Ordering Information:

Device PN	Packing
Part Number-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 5 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

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

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.