

1H1G ~ 1H8G

PRV : 50 - 1000 Volts
I_o : 1.0 Ampere

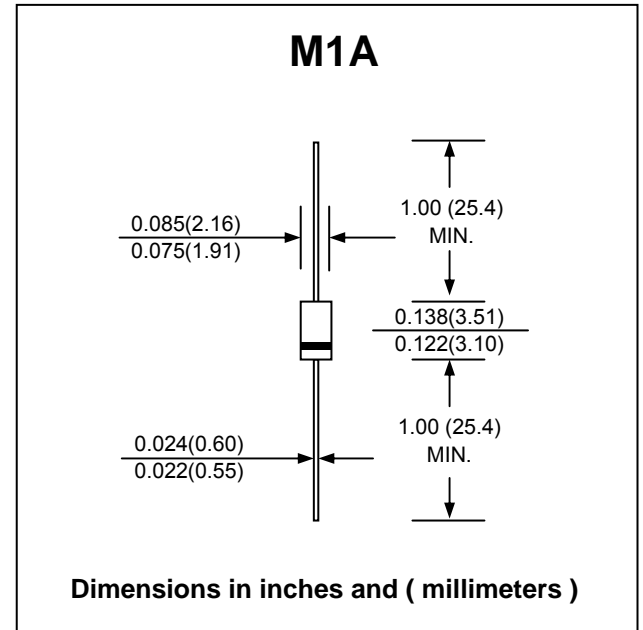
FEATURES :

- * Glass passivated chip
- * High current capability
- * High reliability
- * High speed switching
- * Low leakage
- * Low forward voltage
- * Low power loss, high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : M1A Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.20 gram (approximately)

HIGH EFFICIENCY RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise noted.

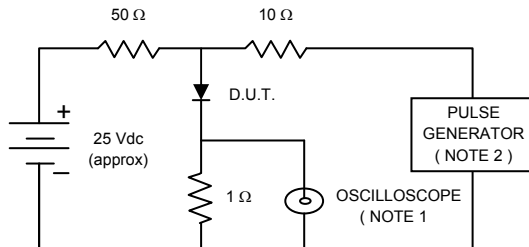
RATING	SYMBOL	1H1G	1H2G	1H3G	1H4G	1H5G	1H6G	1H7G	1H8G	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current at Ta = 25 °C	I _{F(AV)}	1.0								A	
Peak Forward Surge Current , 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	25								A	
Maximum Instantaneous Forward Voltage at I _F = 1.0 A.	V _F	1.0		1.3		1.7				V	
Maximum DC Reverse Current at rated DC Blocking Voltage Ta = 25 °C	I _R	5.0								µA	
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at T _L = 55 °C	I _R	100								µA	
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75				ns	
Typical Junction Capacitance (Note 2)	C _J	15				12				pF	
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150									°C

Notes :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

RATING AND CHARACTERISTIC CURVES (1H1G - 1H8G)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



Notes : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

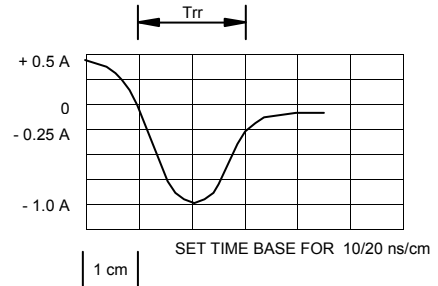


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

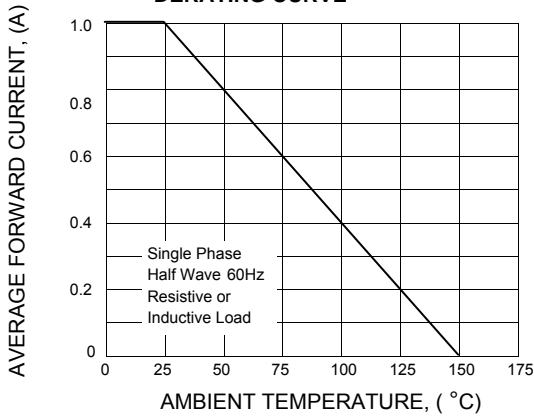


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

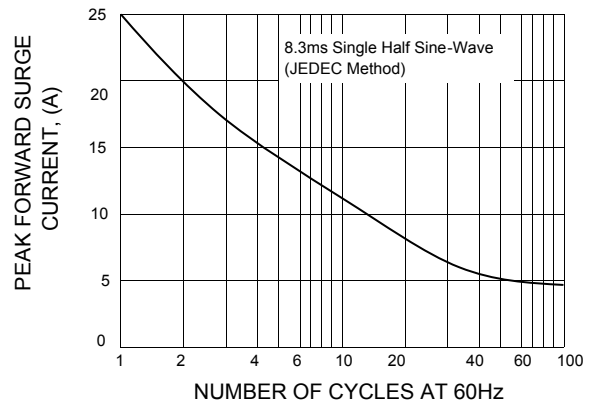


FIG.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

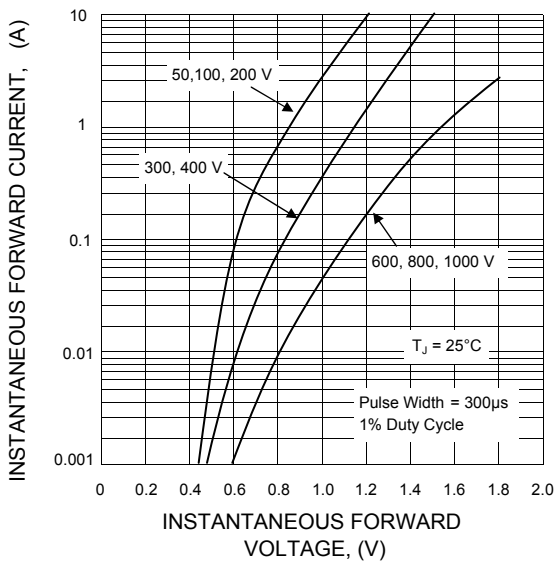


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

