

LMS1A - LMS1M

PRV : 50 - 1000 Volts
Io : 1.0 Ampere

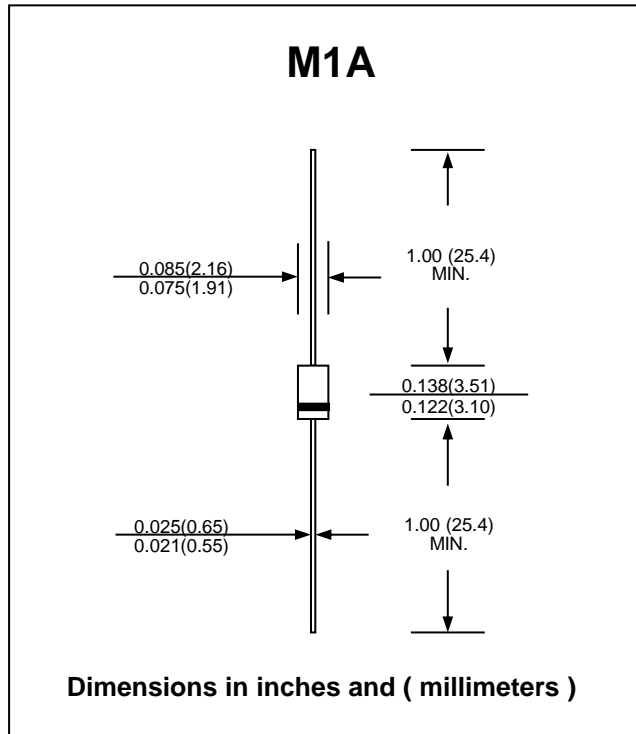
FEATURES :

- * Glass passivated junction chip
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast recovery time
- * 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)

GLASS PASSIVATED JUNCTION SUPER FAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	LMS1A	LMS1B	LMS1D	LMS1G	LMS1J	LMS1K	LMS1M	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current 0.375" (9.5mm) Lead Length $T_a = 55^\circ C$	$I_{F(AV)}$	1.0							A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum Peak Forward Voltage at $I_F = 1.0 A$.	V_F	0.98		1.3		1.8		3.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0					10		μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35							ns
Typical Junction Capacitance (Note 2)	C_J	50							pF
Junction Temperature Range	T_J	- 65 to + 150							$^\circ C$
Storage Temperature Range	T_{STG}	- 65 to + 150							$^\circ C$

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 Vdc

RATING AND CHARACTERISTIC CURVES (LMS1A - LMS1M)

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

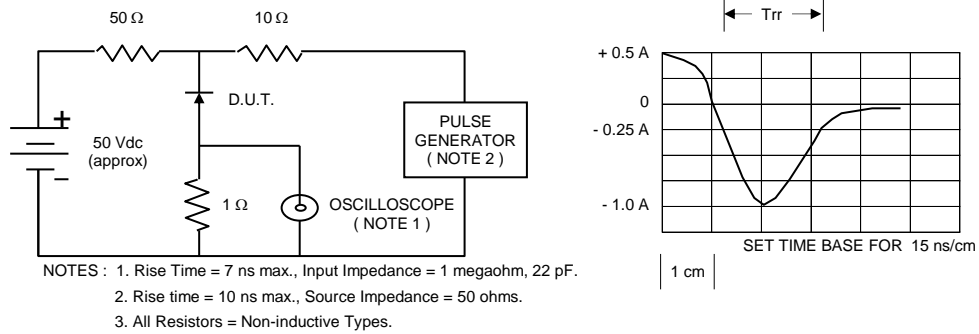


FIG.2 - DERATING CURVE CURRENT

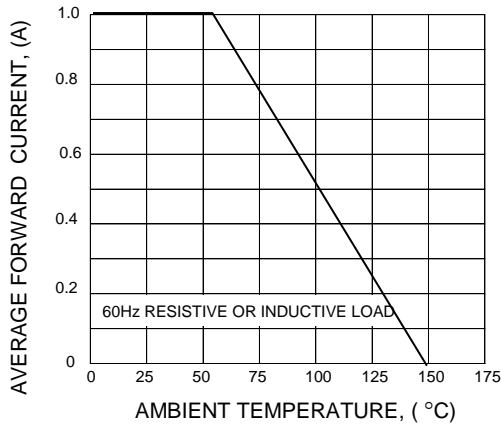


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

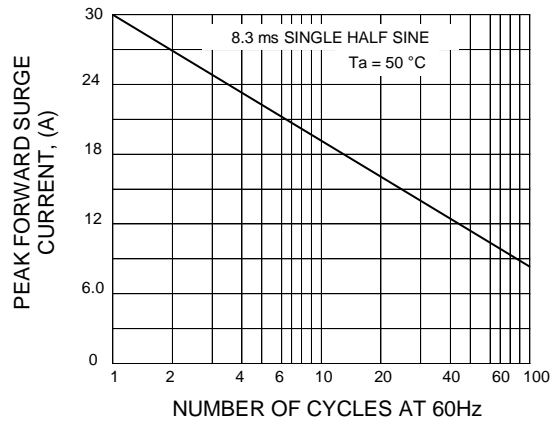


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

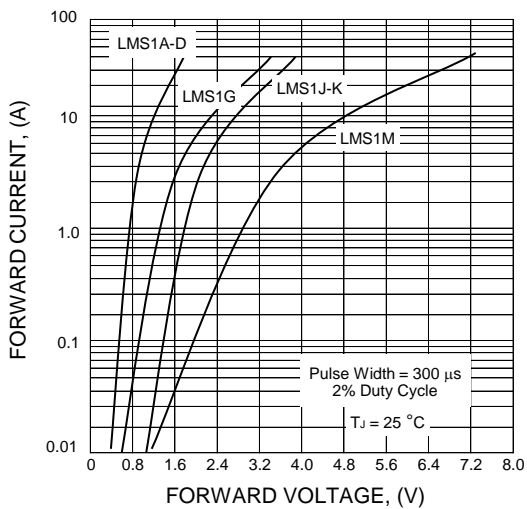


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

