

1SR139-100 ~ 1SR139-600

SILICON RECTIFIER DIODES

PRV : 100 - 600 Volts

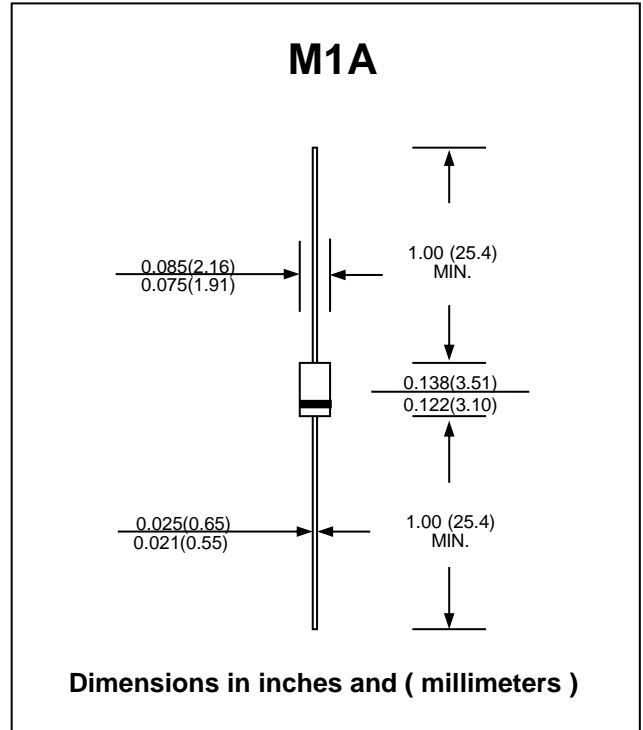
I_o : 1.0 Ampere

FEATURES :

- * Glass passivated junction chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : M1A Molded plastic
- * Epoxy : UL94V-0 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)



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	1SR139-100	1SR139-200	1SR139-400	1SR139-600	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length	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}	40				A
Maximum Forward Voltage at I _F = 1.0 A	V _F	1.1				V
Maximum DC Reverse Current at V _R = V _{RRM}	I _{RM}	10				μA
Junction Temperature Range	T _J	- 40 to + 150				°C
Storage Temperature Range	T _{STG}	- 40 to + 150				°C

RATING AND CHARACTERISTIC CURVES (1SR139-100 ~ 1SR139-600)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

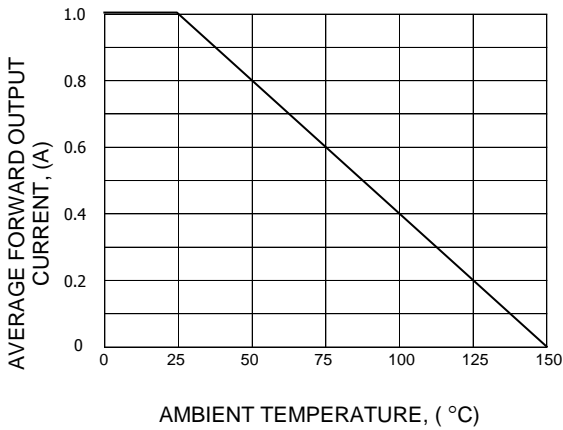


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

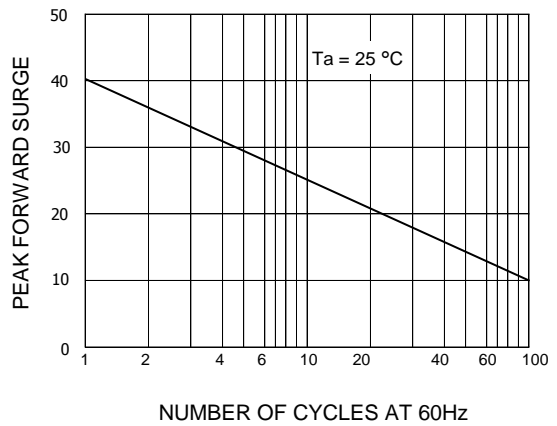


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

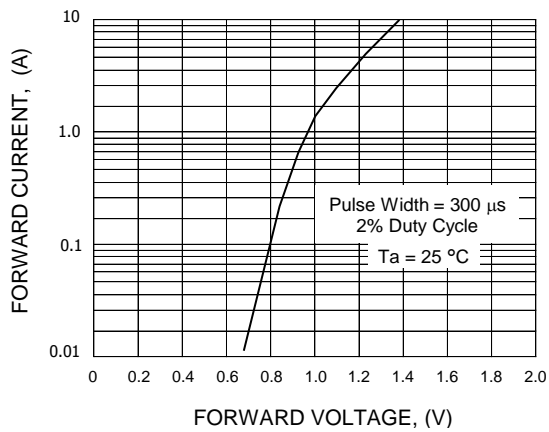


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

