

SR1A THRU SR1M

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE : 50 TO 1000V

CURRENT : 1.0A



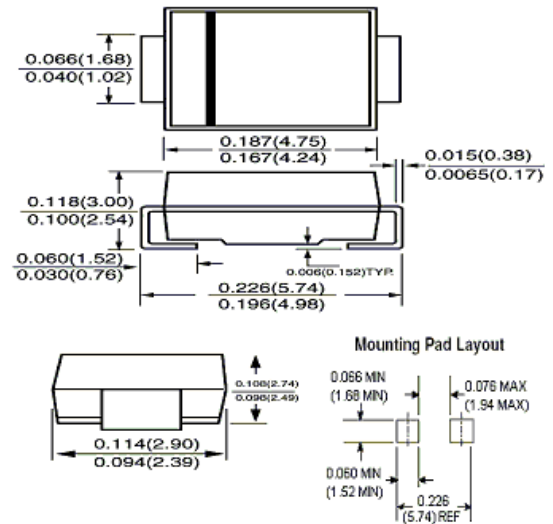
FEATURE

Ideal for surface mount automotive applications
 High temperature metallurgic ally bonded construction
 Capability of meeting environmental standard of MIL-S-19500
 Fast switching for high efficiency
 High temperature soldering guaranteed
 450°C/5sec at terminal
 Complete device submersible temperature of 265°C for 10 seconds in solder bath

MECHANICAL DATA

Terminal : Solder plated, solderable per MIL-STD 202, method 208C
 Case : Molded with UL-94 class V-0 recognized Flame Retardant Epoxy over Glass
 Polarity : color band denotes cathode end
 Mounting position : any

GF1/DO-214BA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

	SYMBOL	SR 1A	SR 1B	SR 1D	SR 1G	SR 1J	SR 1K	SR 1M	Units
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 Rectified current T _L =120°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}	30.0							A
Maximum Forward Voltage at 1.0A	V _f	1.3							V
Maximum full load reverse current full cycle average Ta = 55°C	I _{r(av)}	50.0							µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	5.0 100.0							µA µA
Maximum Reverse Recovery Time (Note1)	T _{rr}	150				250	500		nS
Typical Junction Capacitance (Note 2)	C _j	8.5							pF
Typical Thermal Resistance (Note 3)	R ₍₋₎ JA R ₍₋₎ JL	85.0 28.0							°C / W
Storage and Operating Junction Temperature Range	T _{stg} , T _j	-65 to +175							°C

Note :

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied V_r=4.0V
- Thermal Resistance from Junction to Ambient and from junction to lead, P.C.B. Mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas¹

RATINGS AND CHARACTERISTIC CURVES SR1A THRU SR1M

FIG. 1 - FORWARD CURRENT DERATING CURVE

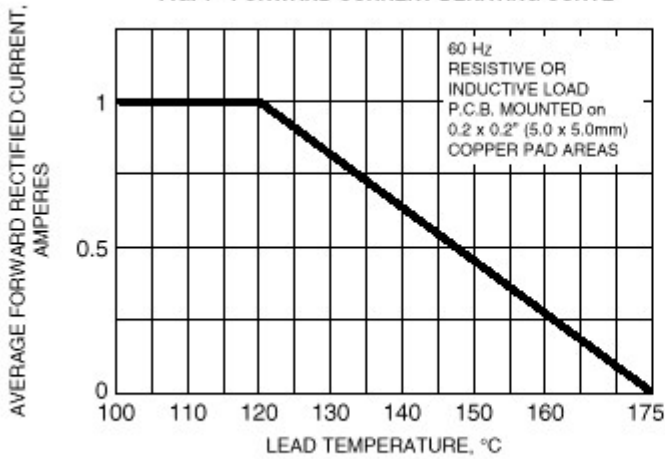


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

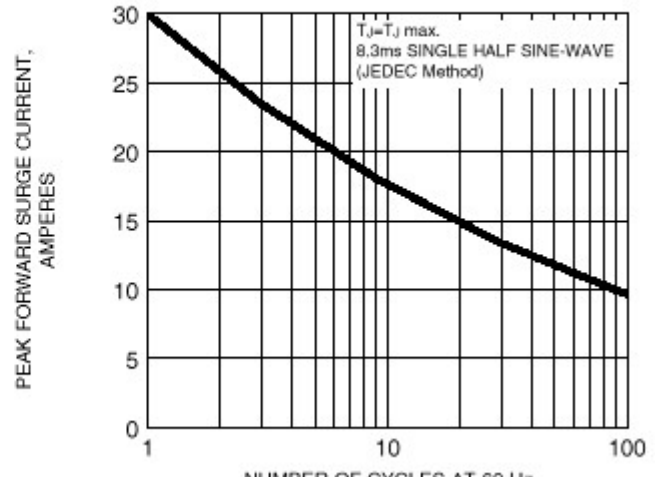


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

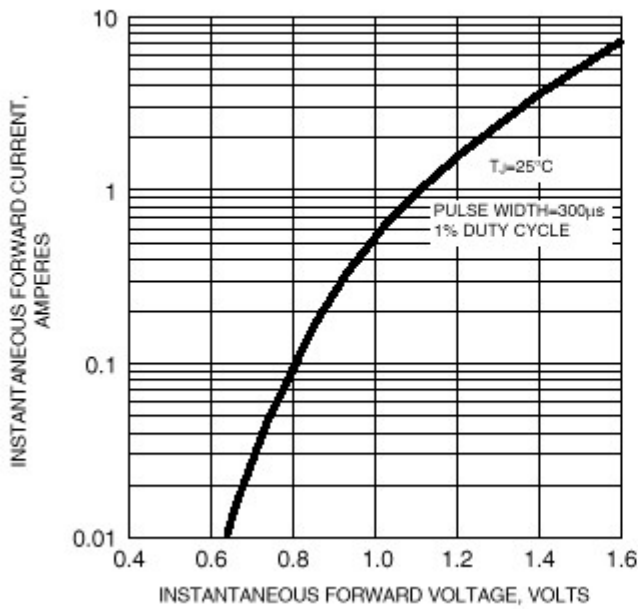


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

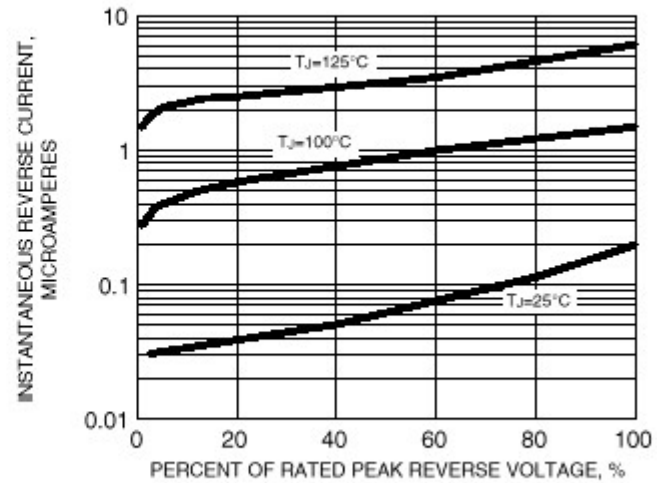
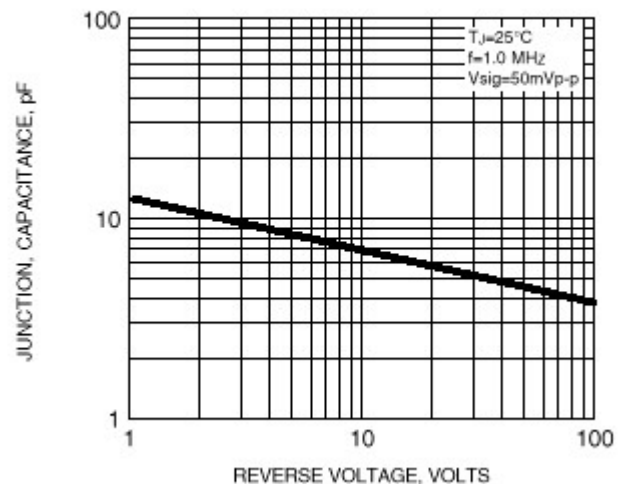


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



¹Rev. A1, April 7th, 2026
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