

SR1A THRU SR1M

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 1.0A



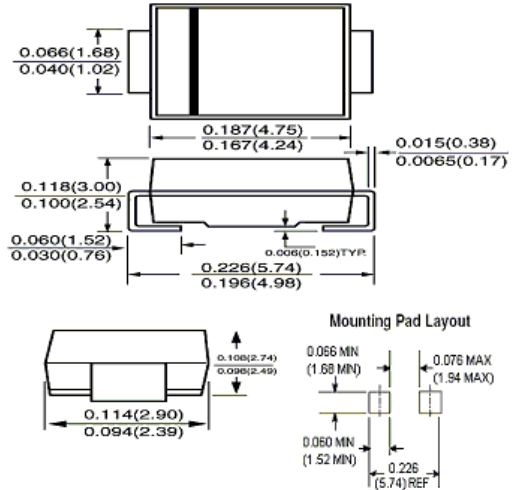
FEATURE

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.

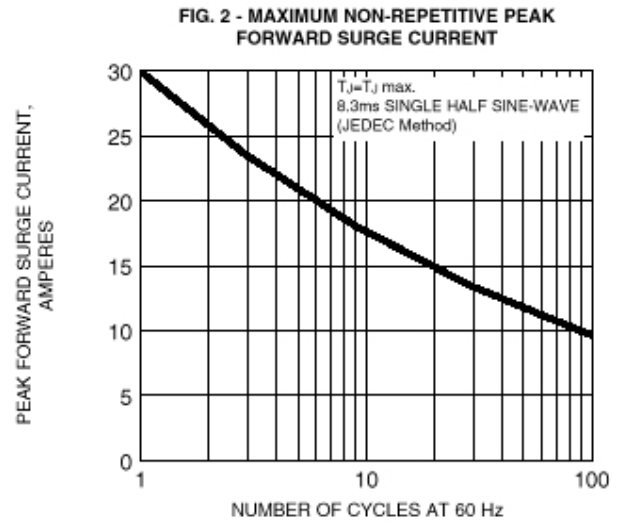
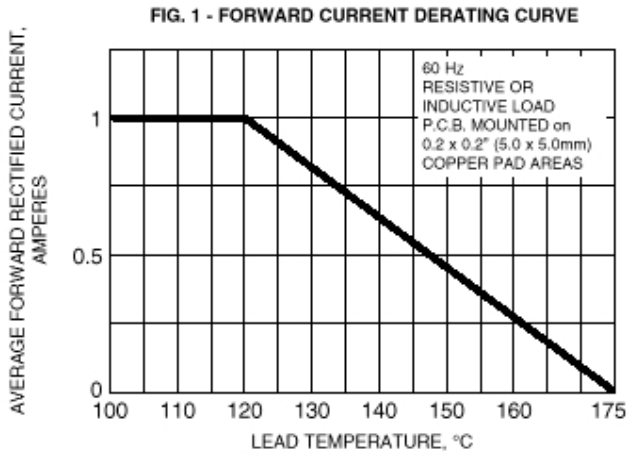
	SYMBOL	SR 1A	SR 1B	SR 1D	SR 1G	SR 1J	SR 1K	SR 1M	Units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified current T _L = 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							μ A
Maximum DC Reverse Current at rated DC blocking voltage Ta = 25°C Ta = 125°C	I _r	5.0 100.0							μ A μ A
Maximum Reverse Recovery Time (Note 1)	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

¹ Rev.A5



2

