

GR2A THRU GR2M

SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A

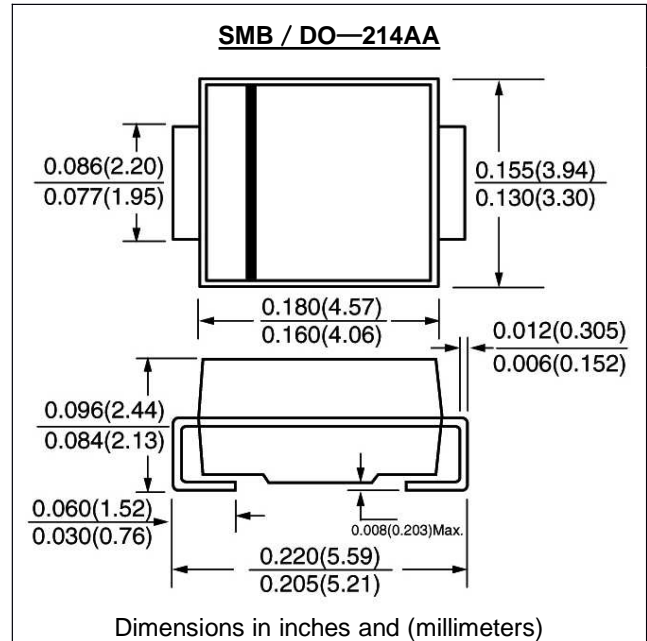


FEATURE

Ideal for surface mount pick and place application
 Low profile package
 Built-in strain relief
 High surge capability
 High temperature soldering guaranteed
 260°C/10sec/at terminals
 Glass passivated chip
 Fast recovery time for high efficiency

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
 Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
 Polarity: color band denotes cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	GR 2A	GR 2B	GR 2D	GR 2G	GR 2J	GR 2K	GR 2M	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 at T _L =100°C	I _{f(av)}	2.0							A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	I _{fsm}	50.0							A
Maximum Instantaneous Forward Voltage at rated forward current	V _f	1.3							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	5.0 200.0							μ A μ A
Maximum Reverse Recovery Time (Note1)	T _{rr}	150			250		500		nS
Typical Junction Capacitance (Note 2)	C _j	50.0							pF
Typical Thermal Resistance (Note 3)	R(jl)	20.0							°C /W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150							°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

1

Fig. 1 — Forward Current Derating Curve

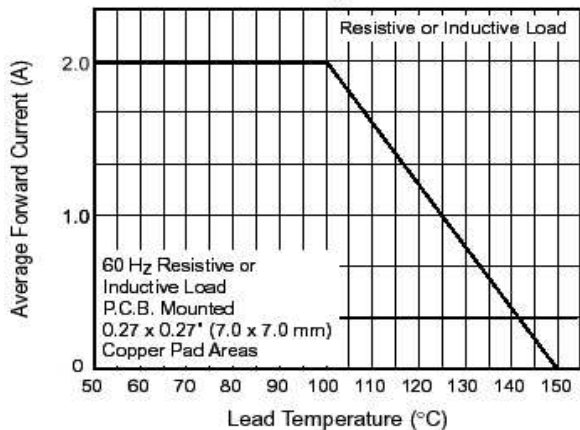


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

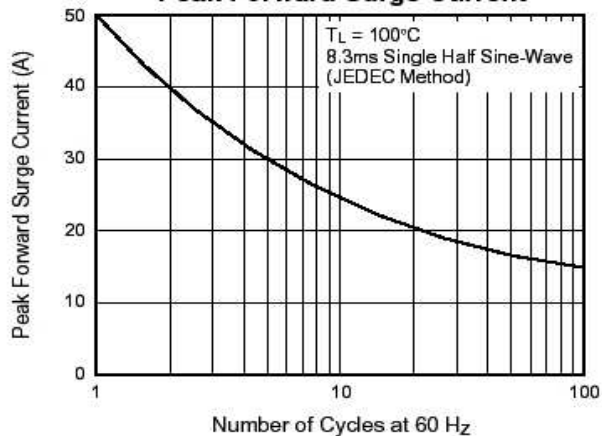


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



FIG. 5 - TYPICAL JUNCTION CAPACITANCE

