

# GR2A THRU GR2M

## SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A

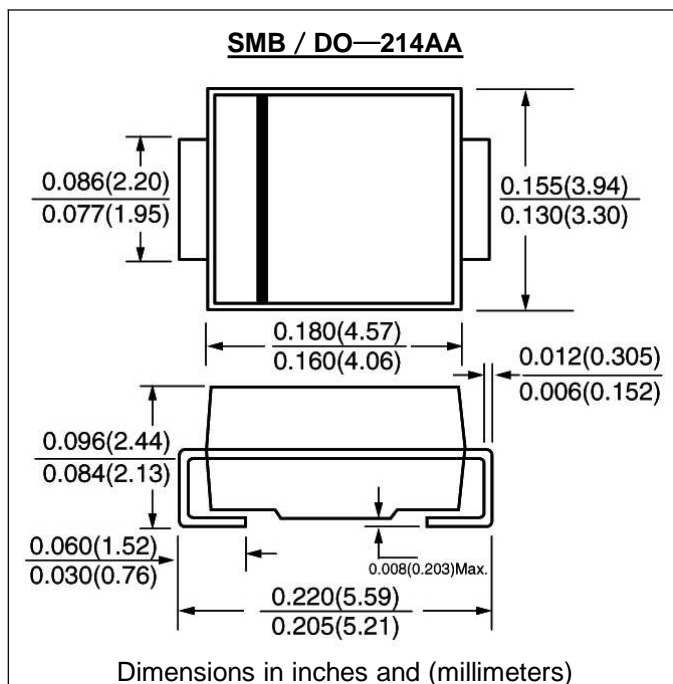


### FEATURE

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%)

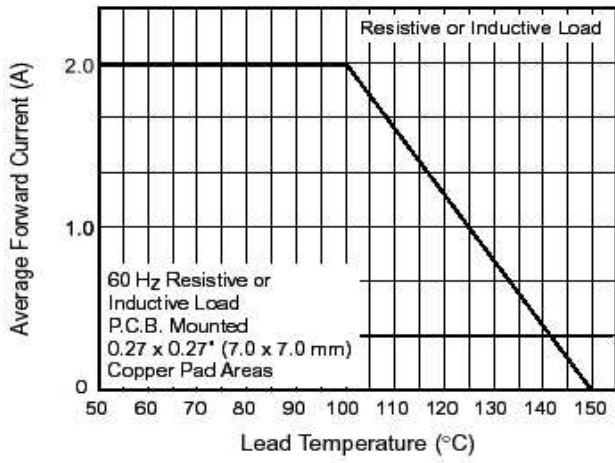
	SYMBOL	GR 2A	GR 2B	GR 2D	GR 2G	GR 2J	GR 2K	GR 2M	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified at T <sub>L</sub> = 100°C	I <sub>f(av)</sub>	2.0							A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	I <sub>fsm</sub>	50.0							A
Maximum Instantaneous Forward Voltage at rated forward current	V <sub>f</sub>	1.3							V
Maximum DC Reverse Current Ta = 25°C at rated DC blocking voltage Ta = 125°C	I <sub>r</sub>	5.0 200.0							μ A μ A
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	150			250		500		nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	50.0							pF
Typical Thermal Resistance (Note 3)	R(jl)	20.0							°C /W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150							°C

**Note:**

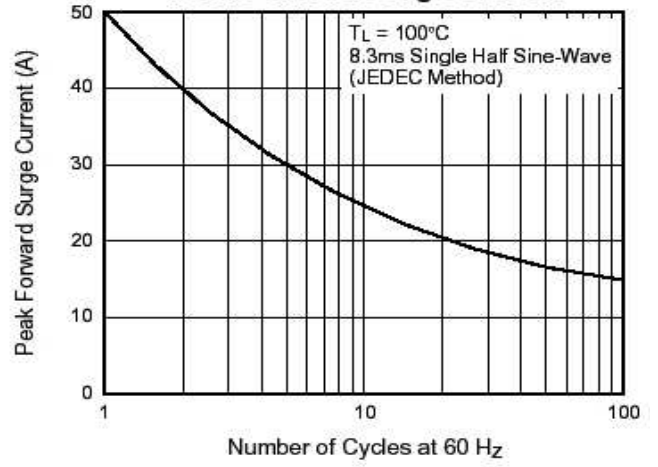
- Reverse Recovery Condition I<sub>f</sub> = 0.5A, I<sub>r</sub> = 1.0A, I<sub>rr</sub> = 0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

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**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**

