

GU2A THRU GU2M

SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A

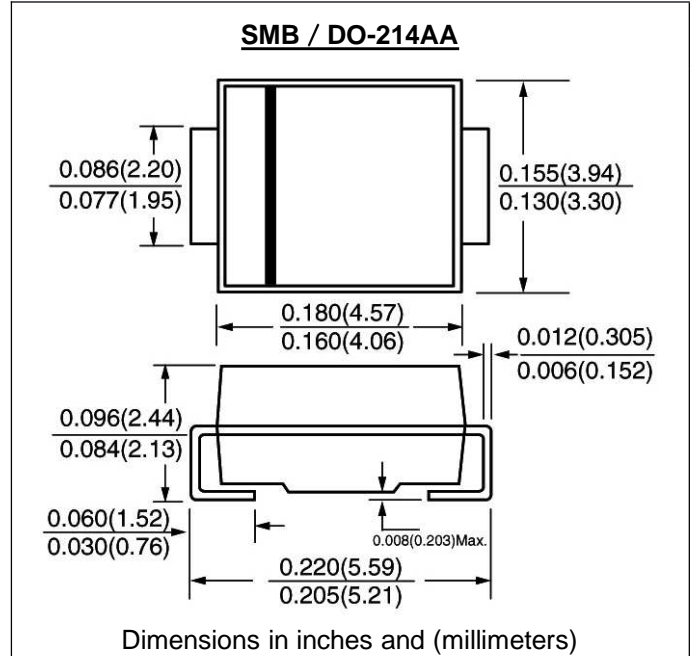


FEATURE

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	GU 2A	GU 2B	GU 2D	GU 2G	GU 2J	GU 2K	GU 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 2.0A	V _f	1.0		1.4		1.7		V	
Maximum DC Reverse Current Ta = 25°C at rated DC blocking voltage Ta = 125°C	I _r	10.0 500.0							μ A μ A
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75			nS
Typical Junction Capacitance (Note 2)	C _j	50.0							pF
Typical Thermal Resistance (Note 3)	R _{th(jl)}	20.0							°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-50 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 4.0Vdc
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

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Fig. 1 — Forward Current Derating Curve

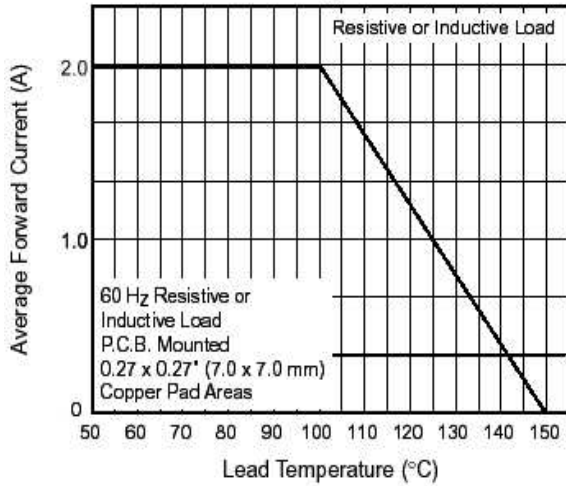


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

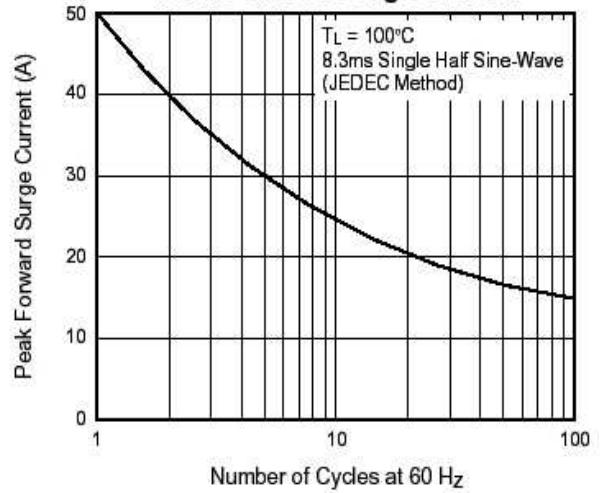


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

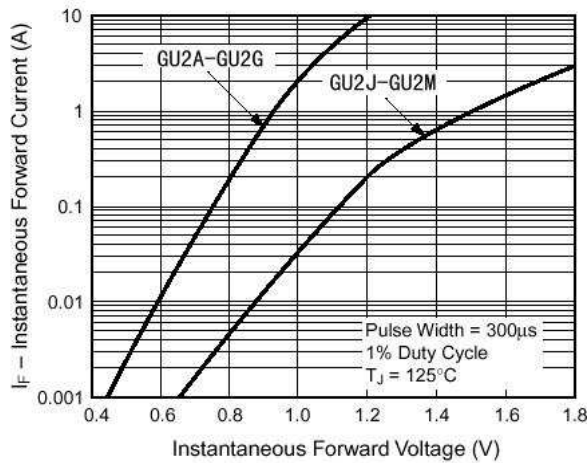


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

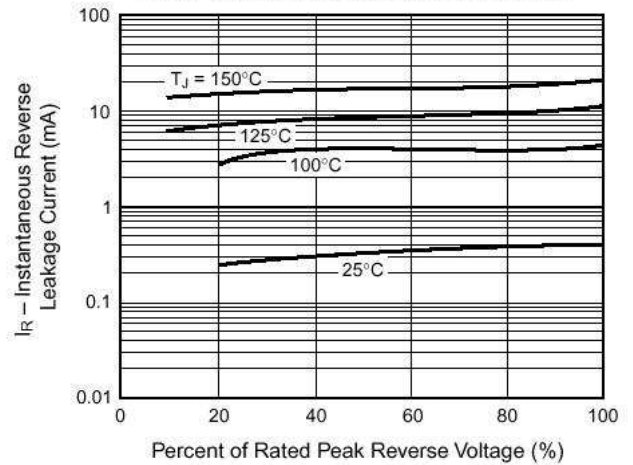


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

