

CONDUCTOR

SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

GS3A THRU GS3M 50V-1000V 3.0A

#### **FEATURES**

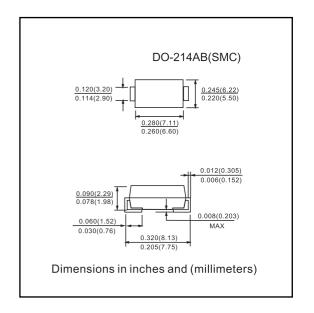
The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 For surface mounted applications Low reverse leakage Built-in strain relief, ideal for automated placement High forward surge current capability High temperature soldering guaranteed: 250°C/10 seconds at terminals Glass passivated chip junction

### **MECHANICAL DATA**

**Case**: JEDEC DO-214AA molded plastic body over passivated chip **Terminals**: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any Weight: 0.007 ounce, 0.25grams



# 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	GS	GS	GS	GS	GS	GS	GS	units
		3A	3B	3D	3G	3J	3K	3M	uiiio
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_L$ =75 $^{\circ}$ C	If(av)	3.0							А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	100.0							Α
Maximum Forward Voltage at rated Forward current	Vf	1.1							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	lr 5.0 250							uA	
3 3									
Typical Reverse Recovery Time (Note 1)	Trr	2.3							us
Typical Junction Capacitance (Note 2)	Cj	60.0							pF
Typical Thermal Resistance (Note 3)	Rth(ja)	47.0							
	Rth(jl)	13.0							°C/W
	Rth(jc)	28.0							
Storage and Operating Temperature Range Ts		-50 to +150							$^{\circ}$

#### Note:

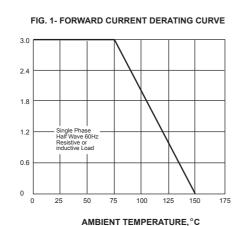
- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied voltage of 4.0Vdc
- 3. Thermal Resistance from junction to ambient and from junction to lead mounted on  $8\times8$ mm copper pad area



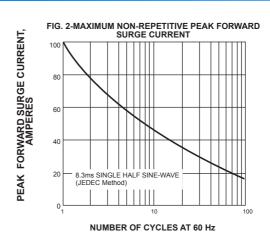
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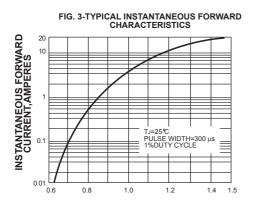
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AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

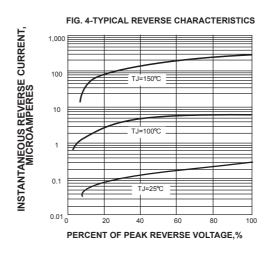


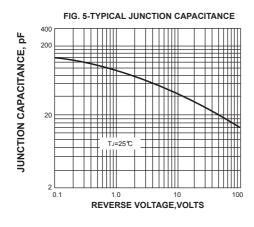
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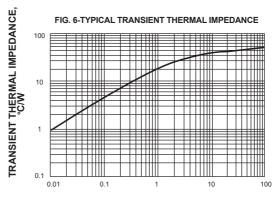




INSTANTANEOUS FORWARD VOLTAGE, VOLTS







t,PULSE DURATION,sec.