

GS3A THRU GS3M

3.0 AMP SURFACE MOUNT SILICON RECTIFIERS

<p>FEATURES</p> <ul style="list-style-type: none"> * Ideal for surface mount applications * Easy pick and place * Built-in strain relief * Fast switching speed <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> * Case: Molded plastic * Epoxy: UL 94V-0 rate flame retardant * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed * Polarity: As Marked * Mounting position: Any * Weight: 2.24 grams 	<p style="text-align: center;">VOLTAGE RANGE 50 to 1000 Volts</p> <p style="text-align: center;">CURRENT 3.0 Ampere</p> <div style="text-align: center;"> <p style="text-align: center;">TO-252 Unit: mm</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p> </div>
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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

TYPE NUMBER	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current At T _L =75°C								3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								100	A
Maximum Instantaneous Forward Voltage at 3.0A								1.10	V
Maximum DC Reverse Current at Rated DC Blocking Voltage								5.0	μA
Typical Junction Capacitance (Note1)								50	pF
Typical Thermal Resistance R _{JL} (Note 2)								12	°C/W
Operating and Storage Temperature Range T _J , T _{stg}								-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (GS3A THRU GS3M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

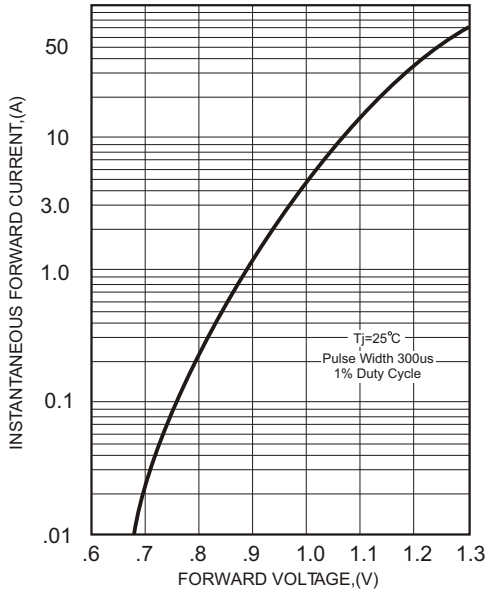


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

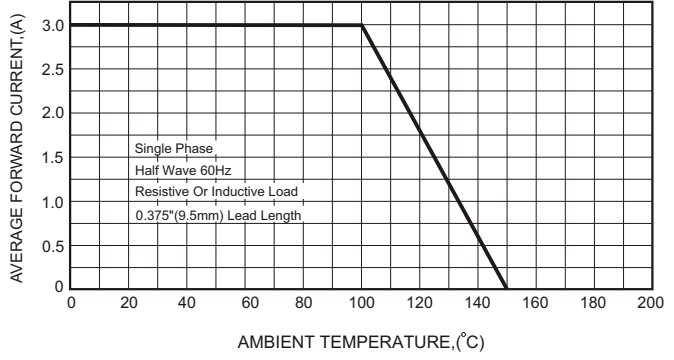


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

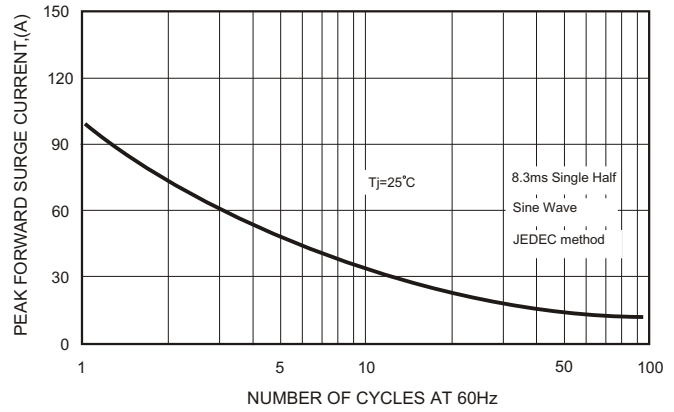


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

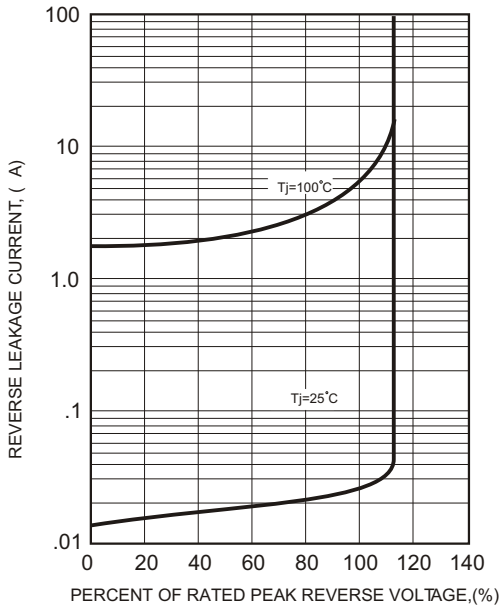


FIG.5-TYPICAL JUNCTION CAPACITANCE

