

GS8A THRU GS8M

8.0 AMP SURFACE MOUNT SILICON RECTIFIERS

<h3 style="margin: 0;">FEATURES</h3> <ul style="list-style-type: none"> * Ideal for surface mount applications * Easy pick and place * Built-in strain relief * Fast switching speed <h3 style="margin: 0;">MECHANICAL DATA</h3> <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 	<div style="text-align: center;"> <h3 style="margin: 0;">VOLTAGE RANGE</h3> <p>50 to 1000 Volts</p> <h3 style="margin: 0;">CURRENT</h3> <p>8.0 Ampere</p> </div> <div style="text-align: center;"> <h3 style="margin: 0;">TO-252</h3> <p>Unit: mm</p> <p style="font-size: small;">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	GS8A	GS8B	GS8D	GS8G	GS8J	GS8K	GS8M		
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								8.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								175	A
Maximum Instantaneous Forward Voltage at 8.0A								1.10	V
Maximum DC Reverse Current Ta=25°C								5.0	μA
at Rated DC Blocking Voltage Ta=125°C								250	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 (GS8A THRU GS8M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

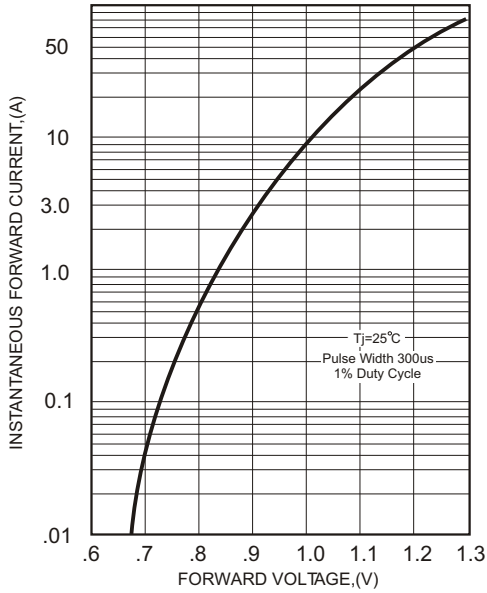


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

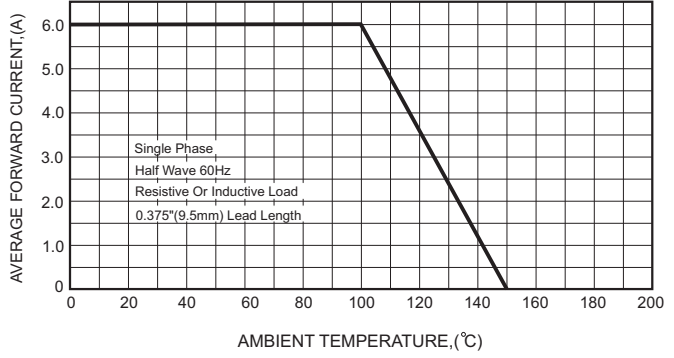


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

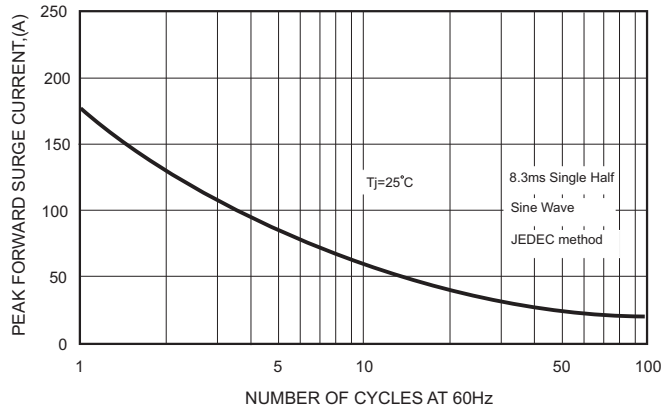


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

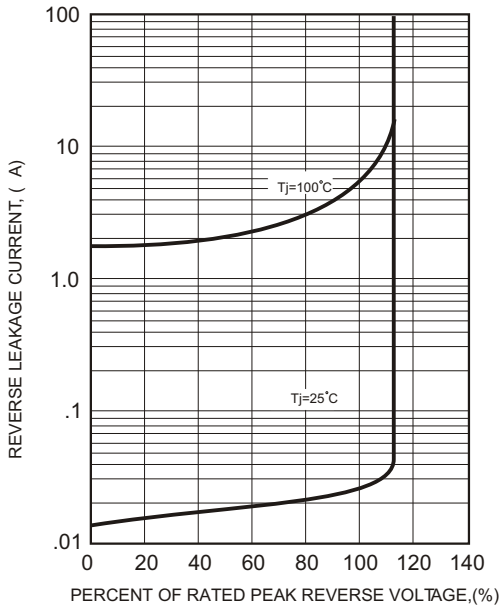


FIG.5-TYPICAL JUNCTION CAPACITANCE

