

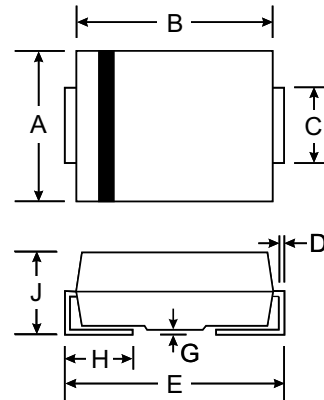
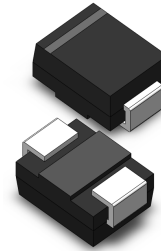
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 2.0 A**

### Features

- 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

### Mechanical Data

- Case : SMB (DO-214AA) Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead formed for Surface mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 0.093 gram



SMB(DO-214AA)		
Dim	Min	Max
<b>A</b>	3.30	3.94
<b>B</b>	4.06	4.70
<b>C</b>	1.91	2.21
<b>D</b>	0.15	0.31
<b>E</b>	5.00	5.59
<b>G</b>	0.10	0.20
<b>H</b>	0.76	1.52
<b>J</b>	2.00	2.62
<b>All Dimensions in mm</b>		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

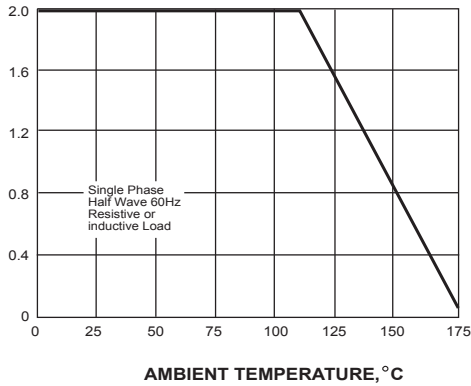
Characteristic	Symbol	GS2A	GS2B	GS2D	GS2G	GS2J	GS2K	GS2M	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T <sub>L</sub> =110°C	I <sub>(AV)</sub>	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60.0							A
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.1							V
Maximum DC reverse current at rated DC blocking voltage <small>T<sub>A</sub>=25°C T<sub>A</sub>=100°C</small>	I <sub>R</sub>	5.0 50.0							μA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	30.0							pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	50.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175							°C

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES GS2A THRU GS2M

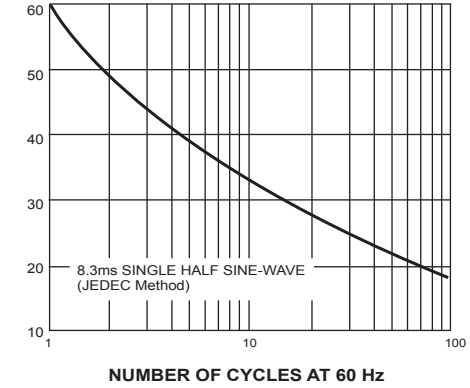
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



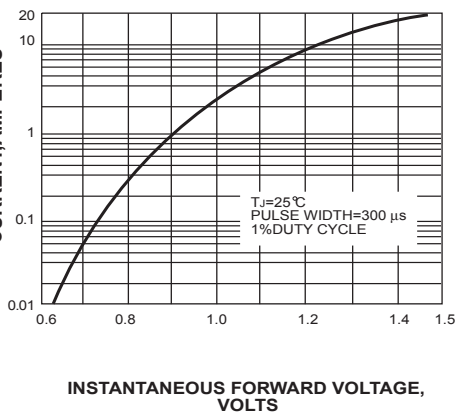
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



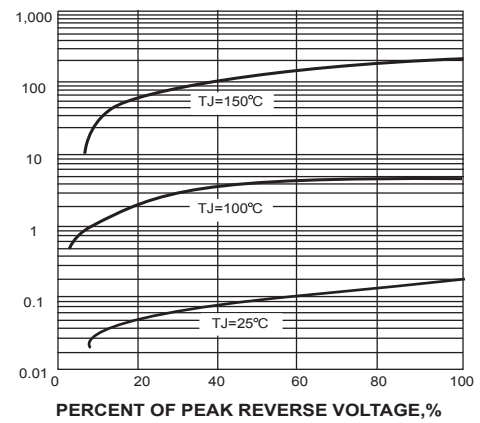
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



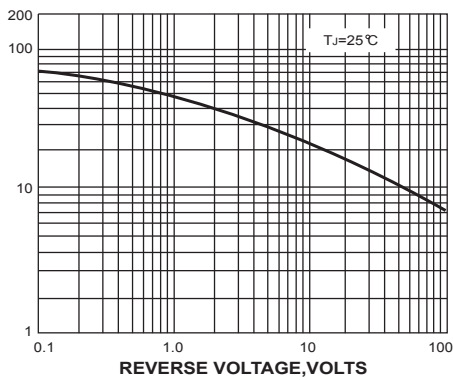
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

