

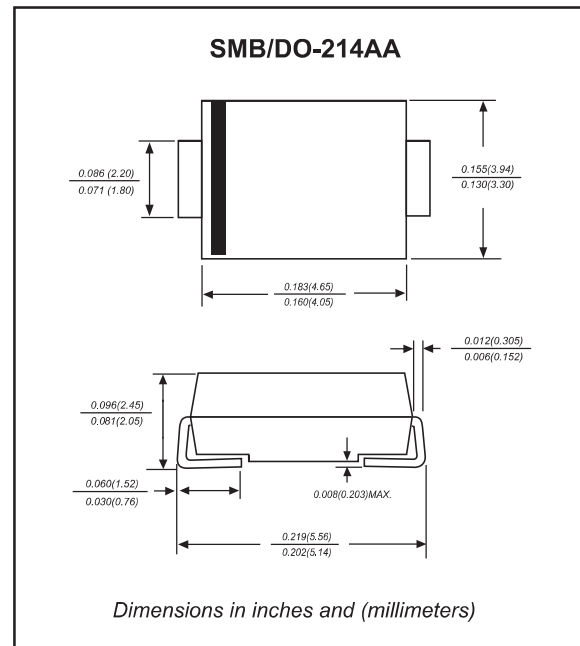
Features

- ◆ 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: 260°C/10 seconds at terminals
- ◆ Glass passivated chip junction
- ◆ Compliant to RoHS Directive 2011/65/EU
- ◆ Halogen-free

Mechanical data

- ◆ **Case:** JEDEC DO-214AA molded plastic body
- ◆ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity:** Color band denotes cathode end
- ◆ **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	UNIT	GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB
Device marking code			GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, resistance load, TL (Fig.1)	IO	A	3.0						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_A=25^\circ\text{C}$	IFSM	A	100						
Storage temperature	Tstg	°C	-55~+150						
Junction temperature	Tj	°C	-55~+150						

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=3.0A	1.15						
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	IRRM	μA	$T_A=25^\circ\text{C}$	5						
			$T_A=125^\circ\text{C}$	100						

Thermal Characteristics ($T_A=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB
Typical Thermal resistance	RθJ-A	°C/W	75 ¹⁾						
	RθJ-L		20 ¹⁾						

Note:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

Rating and characteristic curves

FIG. 1- FORWARD CURRENT DERATING CURVE

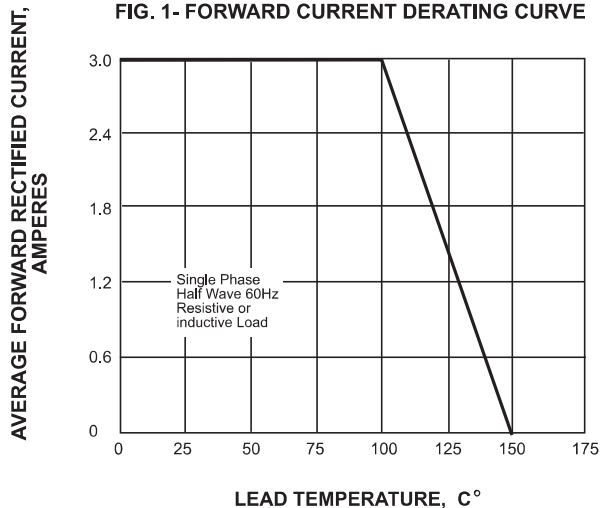


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

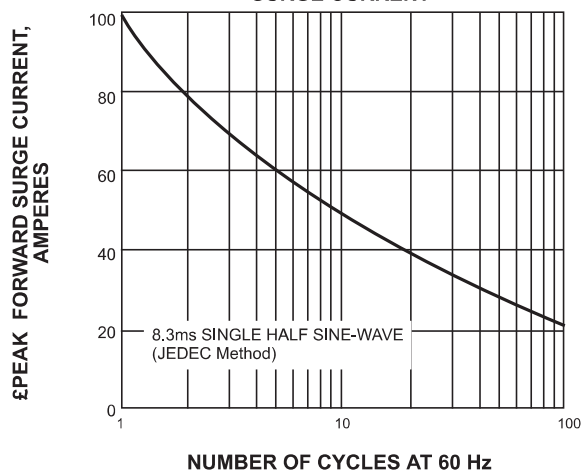


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

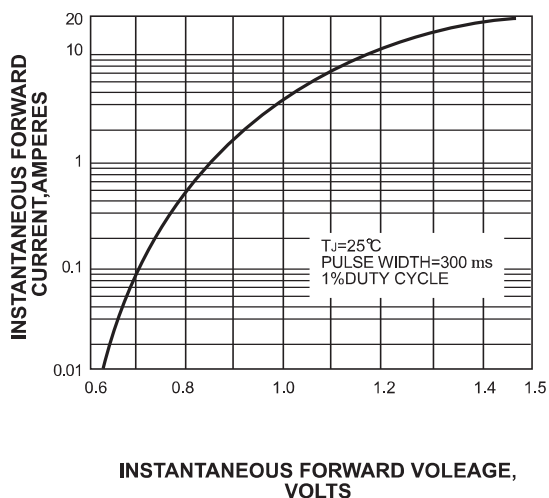


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

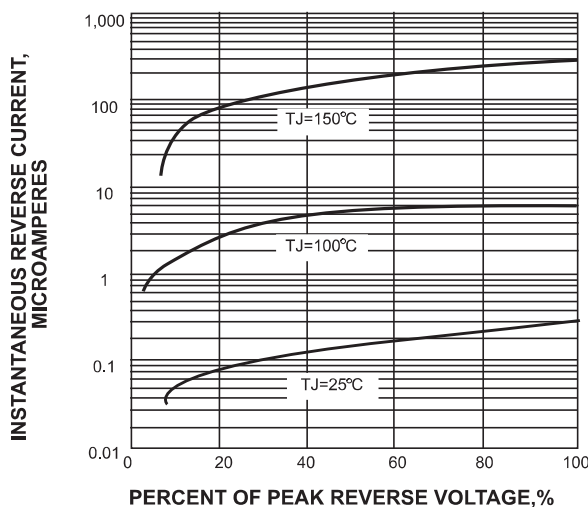


FIG. 5-TYPICAL JUNCTION CAPACITANCE

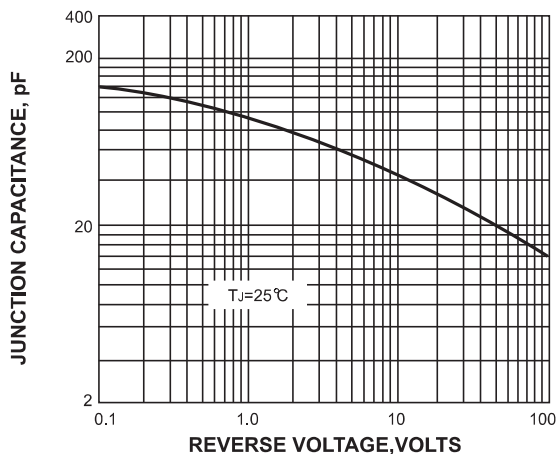
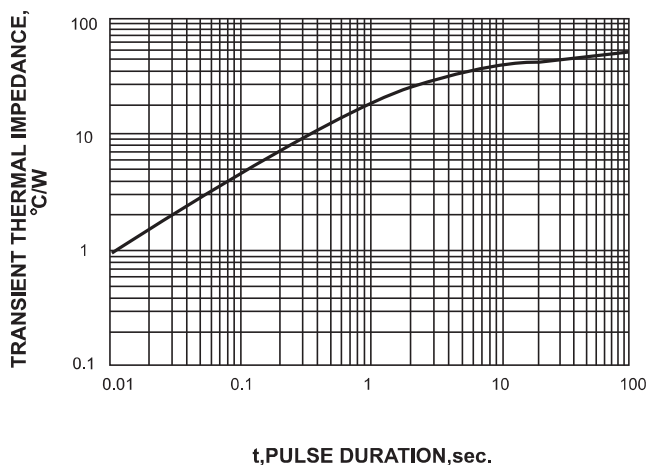


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



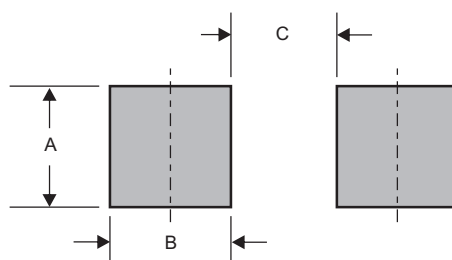
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example
GS3AB GS3BB GS3DB GS3GB GS3JB GS3KB GS3MB	GS3AB GS3BB GS3DB GS3GB GS3JB GS3KB GS3MB	

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.078 (2.00)	0.059 (1.50)	0.110 (2.80)