

GS3MB

3.0AMPS . GLASS PASSIVATED RECTIFIERS

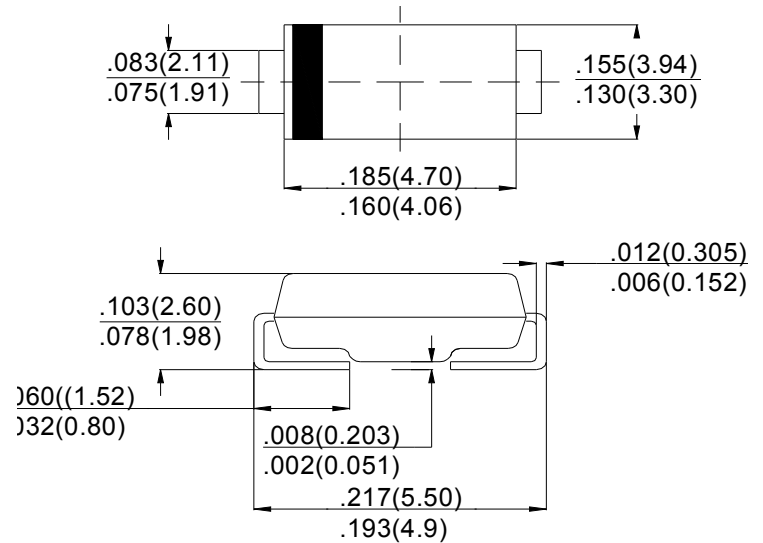
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed:
260°C/10 seconds at terminals.
- . For surface mounted application.
- . Easy pick and place.

MECHANICAL DATA

- . Terminal: Solder plated
- . Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy (free halogen)
- . Polarity: color band denotes cathode
- . Packaging: 12mm tape per EIA STD RS-481

SMB (DO-214AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 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	SYM BOL	GS3MB	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load (JEDEC method)	I_{FSM}	90.0	A
Maximum Forward Voltage at 3.0 A DC	V_F	1.0	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 100.0	μA
Typical Junction Capacitance (Note1)	C_J	60	pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	50	$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 0.2×0.2”(5.0×5.0mm)Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES (GS3MB)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

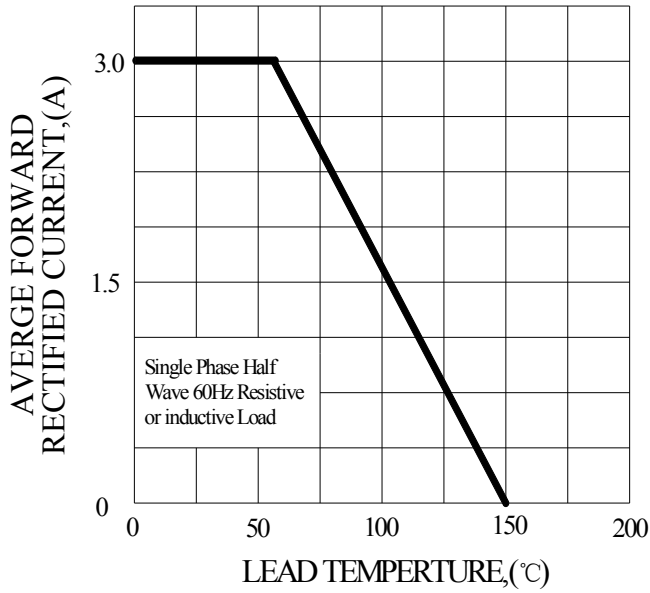


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

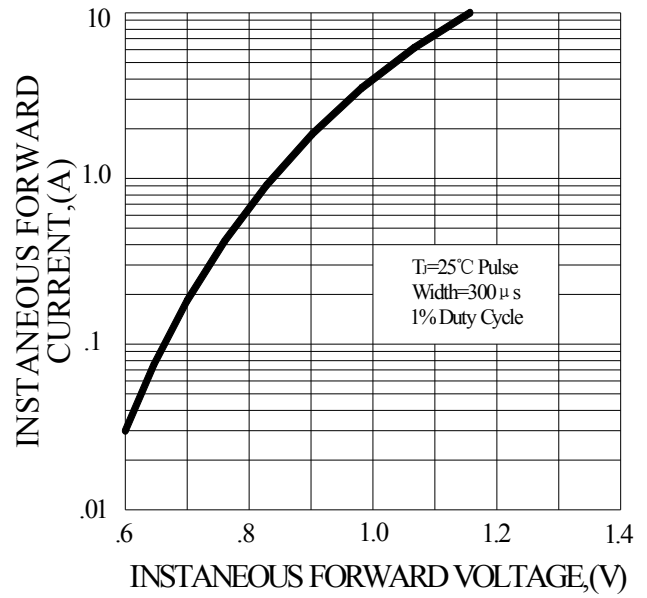


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

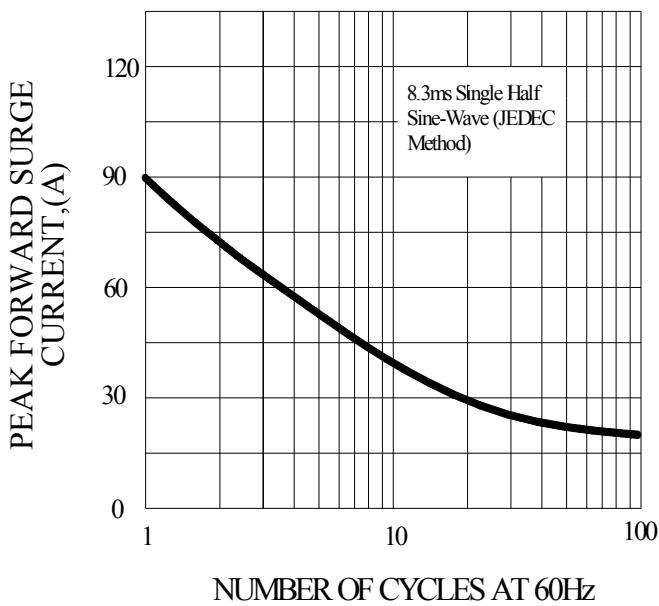
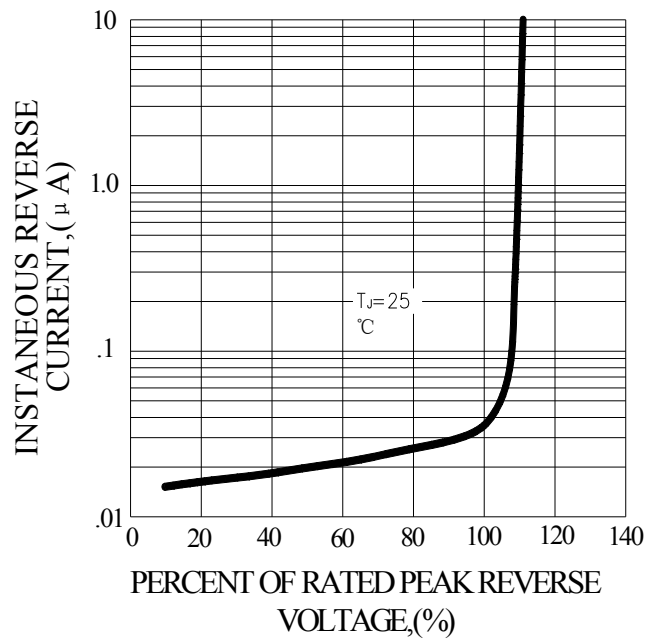
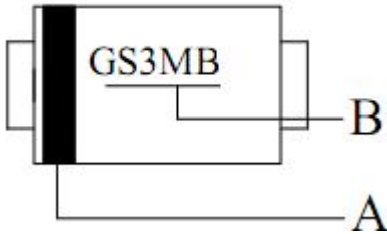


FIG.4-TYPICAL REVERSE CHARACTERISTICS



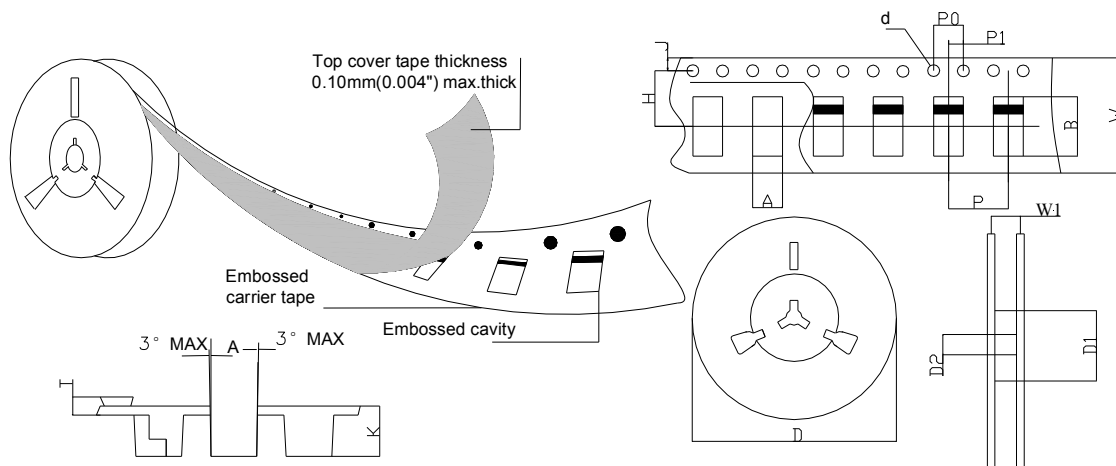
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL	ITEM	SMB(DO-214AA)
Carrier width	A	3.81(0.150)Max
Carrier length	B	5.41(0.213)Max
Sprocket hole	d	ø1.55(0.061)Typ
Reel outer diameter	D	330.0(13.0)Typ
Reel inner diameter	D1	50.0(1.969)Min
Feed hole diameter	D2	13.0(0.512)Typ
Sprocket hole position	J	1.75(0.069)Typ
Punch hole position	H	5.55(0.219)Typ
Carrier depth	K	2.45(0.965)Typ
Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole pitch	P0	4.00(0.157)Typ
Embossment center	P1	2.00(0.079)Typ
Overall tape thickness	T	0.30(0.012)Typ
Tape width	W	12.0(0.472)Typ
Reel width	W1	12.4(0.488)Min