

GS3MBR

3.0AMPS . GLASS PASSIVATED RECTIFIERS

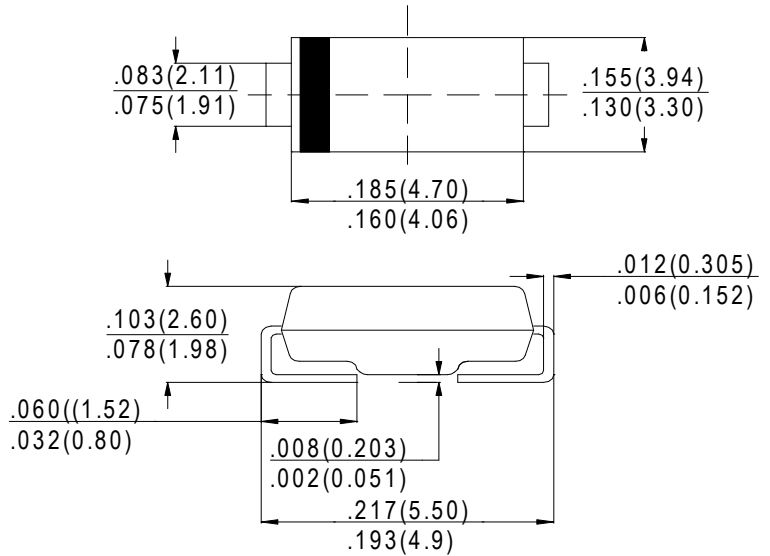
FEATURE

- 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	GS3MBR	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 (GS3MBR)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

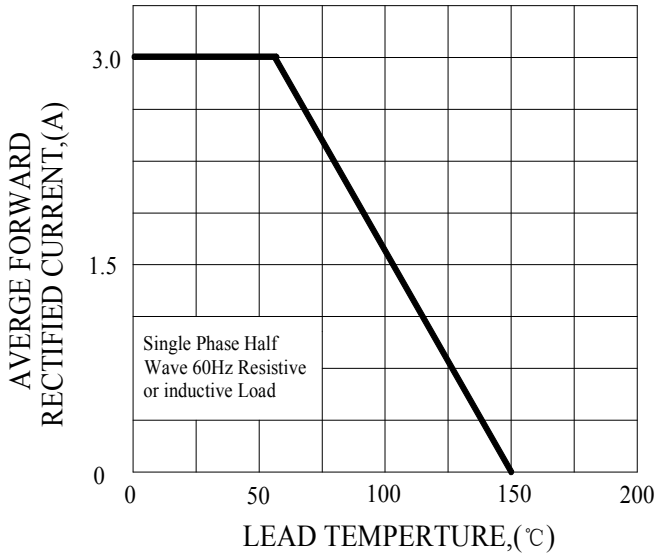


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

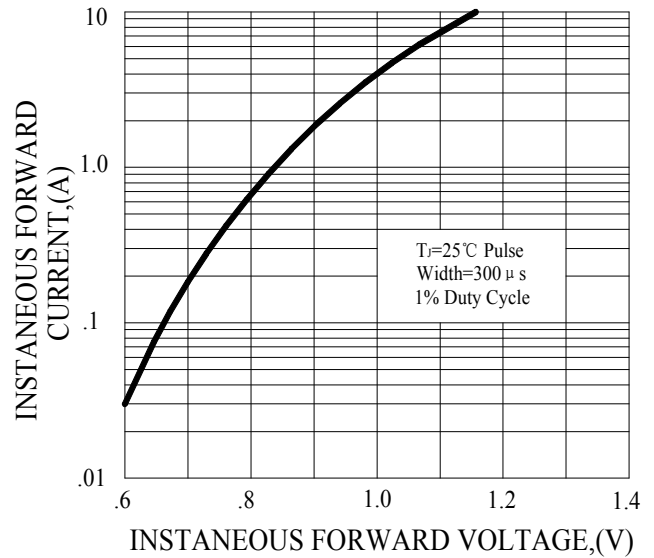


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

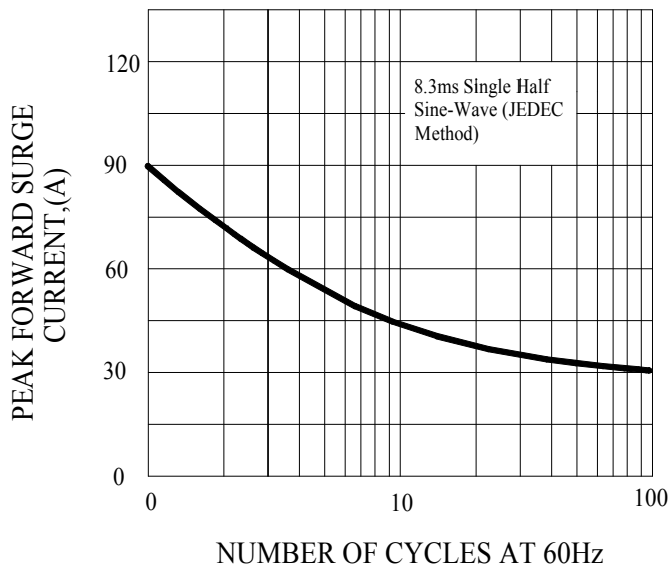
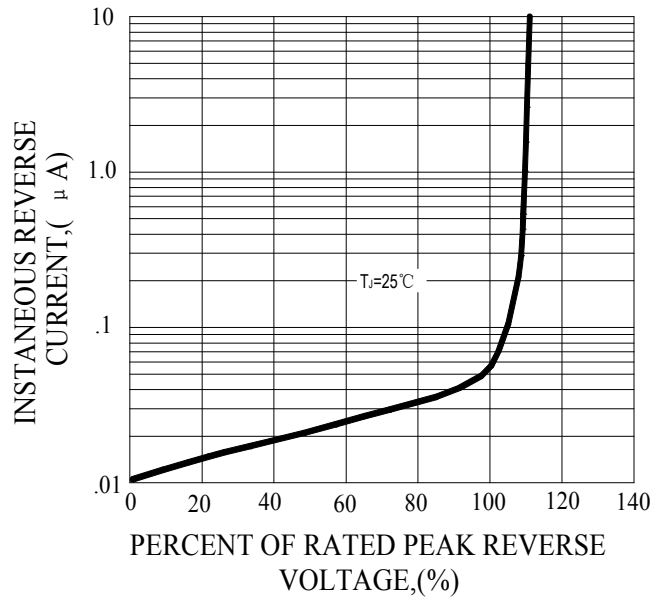
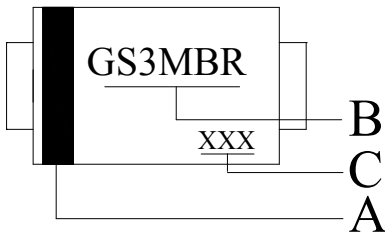


FIG.4-TYPICAL REVERSE CHARACTERISTICS



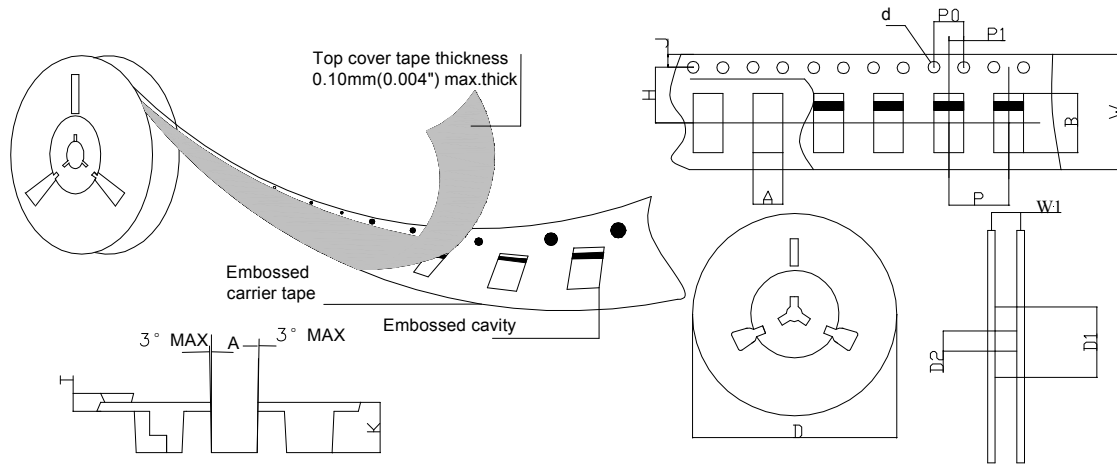
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Date Code

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL	ITEM	SMB(DO-214AA)
	Carrier width	A
	Carrier length	B
	Sprocket hole	d
	Reel outer diameter	D
	Reel inner diameter	D1
	Feed hole diameter	D2
	Sprocket hole position	J
	Punch hole position	H
	Carrier depth	K
	Punch hole pitch	P
	Sprocket hole pitch	P0
	Embossment center	P1
	Overall tape thickness	T
	Tape width	W
	Reel width	W1