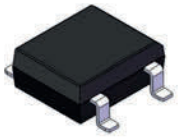
GMS22 thru GMS210

Surface Mount Schottky Barrier Bridge Rectifiers
Reverse Voltage 20V to 100V Forward Current 2.0A

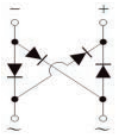
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for over voltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



MBS

RoHS COMPLIANT



Schematic Diagram

Mechanical Data

- Case: MBS molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any

Maximum Ratings & Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load.
For capacitive load, derate current by 20%.)

Parameters		Symbols	GMS 22	GMS 23	GMS 24	GMS 25	GMS 26	GMS 28	GMS 210	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage		V_{RMS}	14	21	28	35	42	57	71	V
Maximum DC Blocking Voltage		V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current (See Fig.1)		$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	50							A
Maximum Instantaneous Forward Voltage at 1.0A[1]		V_F	-			-		0.75		V
Maximum Instantaneous Forward Voltage at 2.0A[1]			0.55			0.70		0.85		V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage[1]	T_A=25°C	I_R	0.2							mA
	T_A=100°C		20.0							
Typical Thermal Resistance[2]		$R_{\theta JA}$	75							°C/W
Operating Junction Temperature Range		T_J	-65 to +125							°C
Storage Temperature Range		T_{STG}	-65 to +150							°C

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle.
2. P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

GOOD-ARK SEMICONDUCTOR

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Ratings and Characteristics Curves

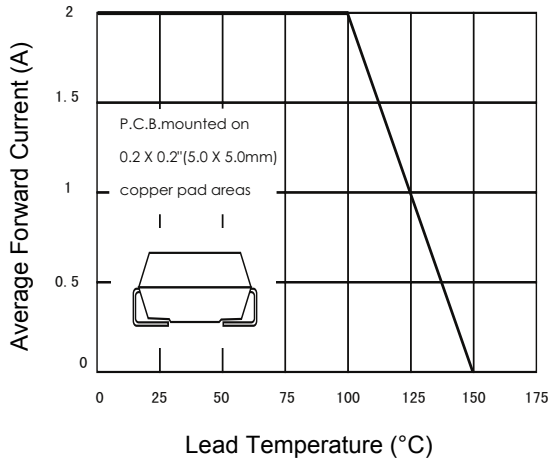

Figure 1. Forward Current Derating Curve

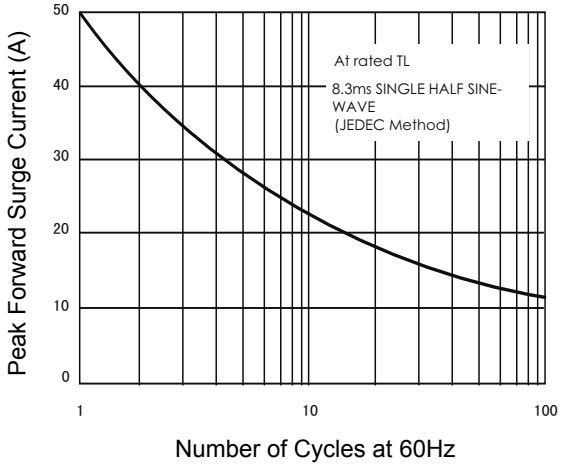

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

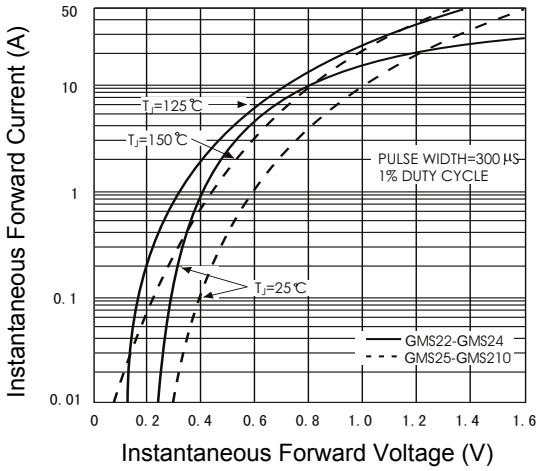

Figure 3. Typical Instantaneous Forward Characteristics

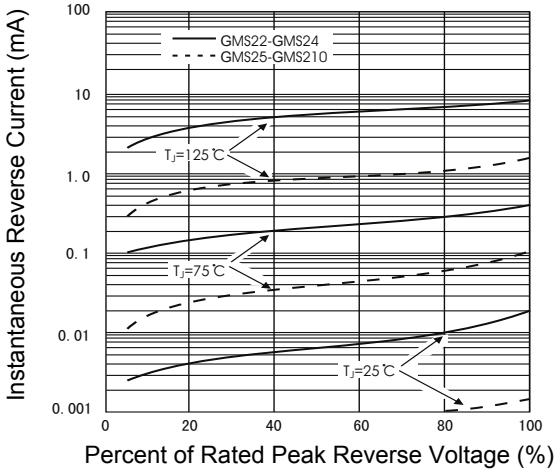

Figure 4. Typical Reverse Characteristics

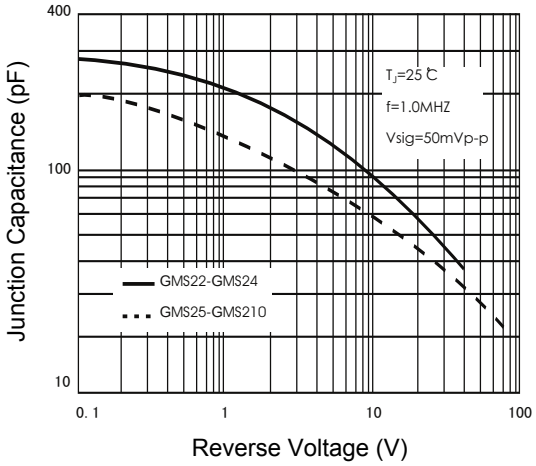

Figure 5. Typical Junction Capacitance

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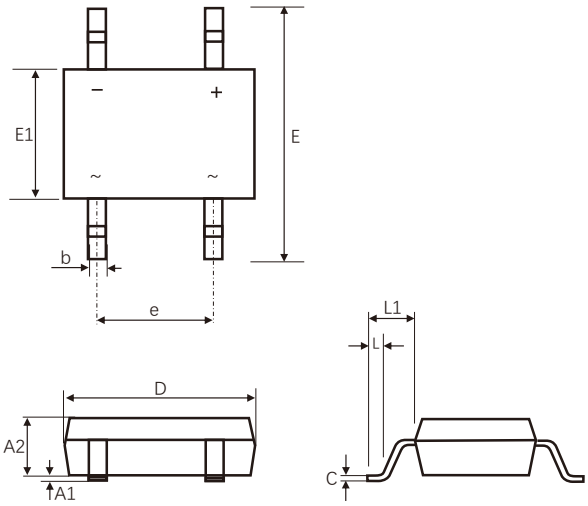
Package Outline Dimensions (MBS)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A1	-	0.20	-	0.008
A2	2.30	2.70	0.090	0.106
b	0.50	0.80	0.019	0.031
C	0.15	0.35	0.006	0.014
D	4.50	4.90	0.177	0.193
E	6.40	7.00	0.252	0.276
E1	3.60	4.10	0.142	0.161
e	2.30	2.70	0.090	0.106
L	0.70	1.10	0.028	0.043
L1	1.30	1.70	0.051	0.067

Order Information

Device	Package	Marking	Carrier	Quantity
GMS22	MBS	MS22	Tape & Reel	3,000 Pcs / Reel
GMS23	MBS	MS23	Tape & Reel	3,000 Pcs / Reel
GMS24	MBS	MS24	Tape & Reel	3,000 Pcs / Reel
GMS25	MBS	MS25	Tape & Reel	3,000 Pcs / Reel
GMS26	MBS	MS26	Tape & Reel	3,000 Pcs / Reel
GMS28	MBS	MS28	Tape & Reel	3,000 Pcs / Reel
GMS210	MBS	MS210	Tape & Reel	3,000 Pcs / Reel