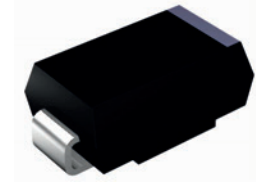


GSS22B thru GSS220B

Surface Mount Schottky Rectifiers
 Reverse Voltage 20V to 200V Forward Current 2A

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C



DO-214AA (SMB)

Mechanical Data

- Package: DO-214AA (SMB)
- Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	GSS 22B	GSS 23B	GSS 24B	GSS 25B	GSS 26B	GSS 28B	GSS 210B	GSS 215B	GSS 220B	Unit	
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
Average Rectified Output Current @ 60Hz Half-Sine Wave, Resistance Load, T _L (FIG.1)	I _o	2.0									A	
Surge (Non-Repetitive) Forward Current @ 60Hz Half-Sine Wave, 1 Cycle, T _A =25°C	I _{FSM}	50									A	
Thermal Resistance, Junction to Ambient ¹	R _{θJ-A}	75									°C/W	
Thermal Resistance, Junction to Lead ¹	R _{θJ-L}	17									°C/W	
Junction Temperature	T _J	-55 To +150					-55 To +175					°C
Storage Temperature	T _{stg}	-55 To +150									°C	

Note

1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0mm x 5.0mm) copper pad areas

GSS22B thru GSS220B

Surface Mount Schottky Rectifiers
 Reverse Voltage 20V to 200V Forward Current 2A

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

Parameter	Symbol	Conditions	GSS 22B	GSS 23B	GSS 24B	GSS 25B	GSS 26B	GSS 28B	GSS 210B	GSS 215B	GSS 220B	Unit
Maximum Instantaneous Forward Voltage Drop	V_F	$I_{FM}=2.0\text{A}$	0.55		0.70		0.85		0.95			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_{RM}=V_{RRM}$	I_{RRM}	$T_A=25^\circ\text{C}$	0.50				0.10				mA	
		$T_A=100^\circ\text{C}$	10				5					

Typical Characteristic Curves

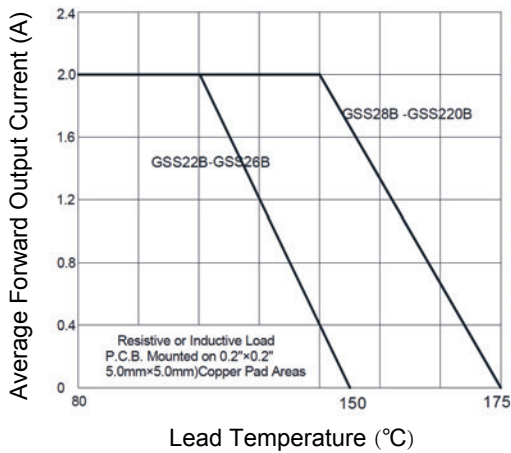


Figure 1. I_o - T_L Curve

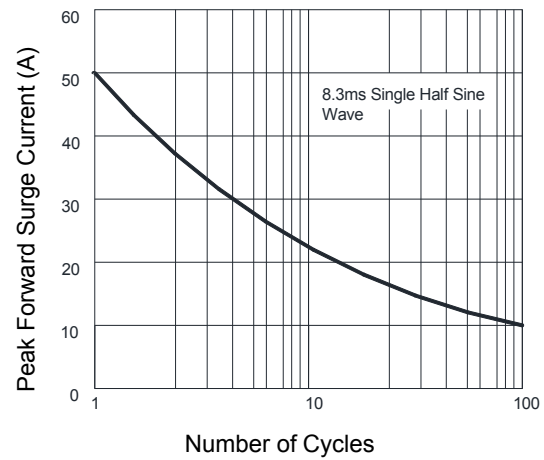


Figure 2. Surge Forward Current Capability

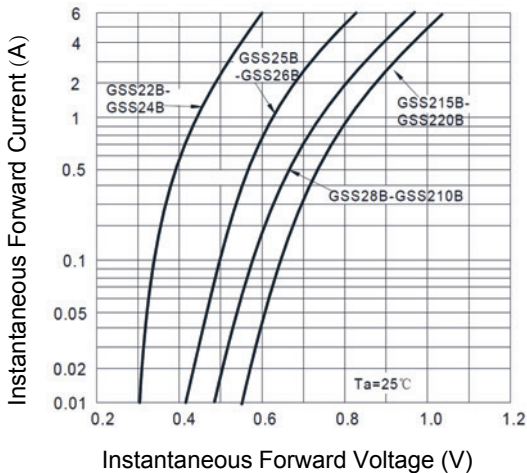


Figure 3. Forward Voltage

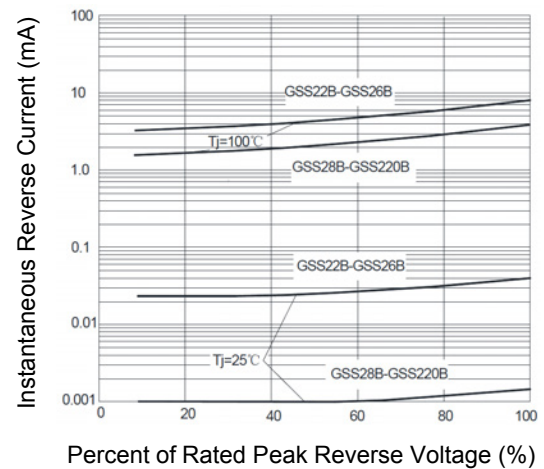
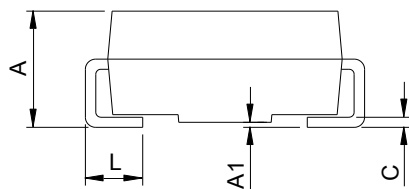
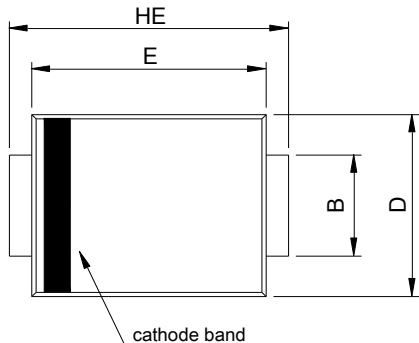


Figure 4. Typical Reverse Characteristics

GSS22B thru GSS220B

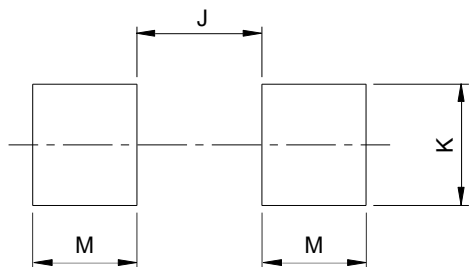
Surface Mount Schottky Rectifiers
 Reverse Voltage 20V to 200V Forward Current 2A

Package Outline Dimensions DO-214AA (SMB)



SMB (DO-214AA)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.95	2.65	0.077	0.104
A1	0.00	0.20	0.000	0.008
B	1.95	2.20	0.077	0.087
C	0.15	0.31	0.006	0.012
D	3.30	3.95	0.130	0.156
E	4.06	4.60	0.160	0.181
HE	5.10	5.60	0.201	0.220
L	0.76	1.60	0.030	0.063

Recommended Pad Layout



Recommended Pad Layout (Reference ONLY)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.60	-	0.102
K	2.20	-	0.087	-
M	1.80	-	0.071	-

Order Information

Device	Package	Marking	Carrier	Quantity
GSS22B	DO-214AA (SMB)	SS22B	Tape & Reel	3,000pcs / Reel
GSS23B	DO-214AA (SMB)	SS23B	Tape & Reel	3,000pcs / Reel
GSS24B	DO-214AA (SMB)	SS24B	Tape & Reel	3,000pcs / Reel
GSS25B	DO-214AA (SMB)	SS25B	Tape & Reel	3,000pcs / Reel
GSS26B	DO-214AA (SMB)	SS26B	Tape & Reel	3,000pcs / Reel
GSS28B	DO-214AA (SMB)	SS28B	Tape & Reel	3,000pcs / Reel
GSS210B	DO-214AA (SMB)	SS210B	Tape & Reel	3,000pcs / Reel
GSS215B	DO-214AA (SMB)	SS215B	Tape & Reel	3,000pcs / Reel
GSS220B	DO-214AA (SMB)	SS220B	Tape & Reel	3,000pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com