

GSS22A thru GSS220A

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-214AC (SMA)

Mechanical Data

- Package: DO-214AC (SMA)
- 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 22A	GSS 23A	GSS 24A	GSS 25A	GSS 26A	GSS 28A	GSS 210A	GSS 215A	GSS 220A	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
Junction Temperature	T _j	-55 To +150					-55 To +175				°C
Storage Temperature	T _{stg}	-55 To +150									°C
Thermal Resistance, Junction to Ambient ¹	R _{θJ-A}	75									°C/W
Thermal Resistance, Junction to Lead ¹	R _{θJ-L}	17									°C/W

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

GSS22A thru GSS220A

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	GSS	GSS	GSS	GSS	GSS	GSS	GSS	GSS	Unit
			22A	23A	24A	25A	26A	28A	210A	215A	220A	
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					

Ratings and Characteristic Curves

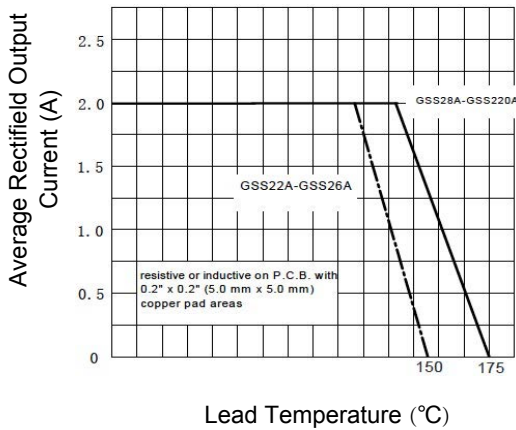


Figure 1. I_o - T_L Curve

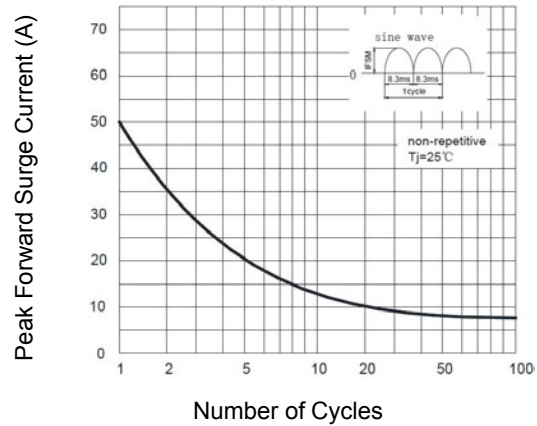


Figure 2. Forward Surge Current Capability

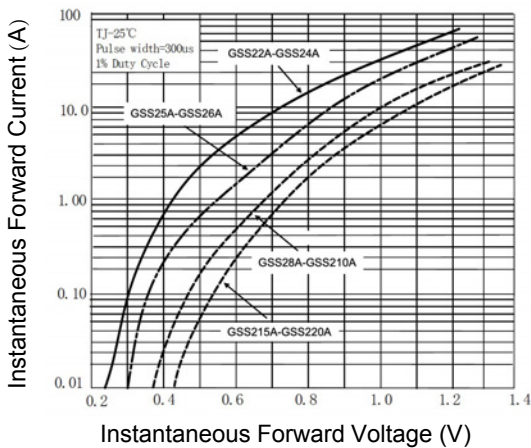


Figure 3. Forward Voltage

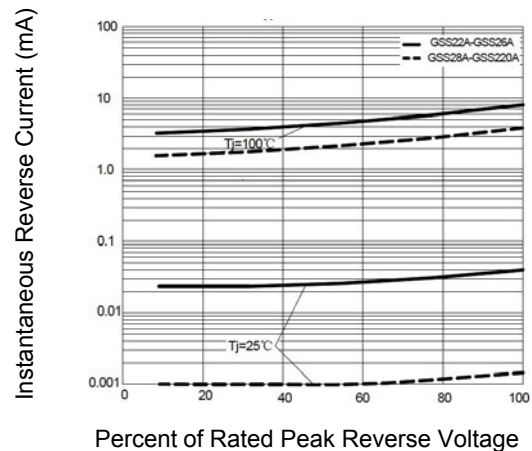
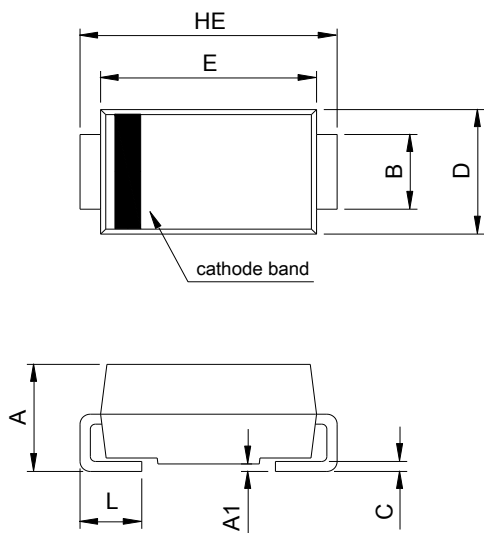


Figure 4. Typical Reverse Characteristics

GSS22A thru GSS220A

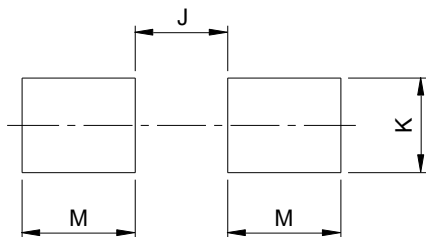
Surface Mount Schottky Rectifiers
 Reverse Voltage 20V to 200V Forward Current 2A

Package Outline Dimensions DO-214AC (SMA)



DIM	SMA (DO-214AC)			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.90	2.30	0.075	0.091
A1	0.00	0.20	0.000	0.008
B	1.25	1.65	0.049	0.065
C	0.15	0.31	0.006	0.012
D	2.35	2.90	0.093	0.114
E	3.99	4.60	0.157	0.181
HE	4.80	5.30	0.189	0.209
L	0.76	1.52	0.030	0.060

Recommended Pad Layout



DIM	Recommended Pad Layout (Reference ONLY)			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.20	-	0.087
K	1.72	-	0.068	-
M	2.00	-	0.079	-

Order Information

Device	Package	Marking	Quantity	HSF Status
GSS22A	DO-214AC (SMA)	SS22A	7,500pcs / Reel	RoHS Compliant
GSS23A	DO-214AC (SMA)	SS23A	7,500pcs / Reel	RoHS Compliant
GSS24A	DO-214AC (SMA)	SS24A	7,500pcs / Reel	RoHS Compliant
GSS25A	DO-214AC (SMA)	SS25A	7,500pcs / Reel	RoHS Compliant
GSS26A	DO-214AC (SMA)	SS26A	7,500pcs / Reel	RoHS Compliant
GSS28A	DO-214AC (SMA)	SS28A	7,500pcs / Reel	RoHS Compliant
GSS210A	DO-214AC (SMA)	SS210A	7,500pcs / Reel	RoHS Compliant
GSS215A	DO-214AC (SMA)	SS215A	7,500pcs / Reel	RoHS Compliant
GSS220A	DO-214AC (SMA)	SS220A	7,500pcs / Reel	RoHS Compliant

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