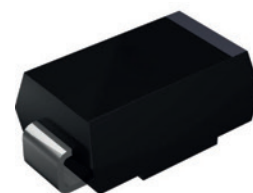


Features

- Guarding for overvoltage protection
- Low power losses
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Solder dip 260°C max. 10s, per JESD22-B106



DO-214AB (SMC)

Mechanical Data

- Package: DO-214AB (SMC)
 Molding compound meets UL 94V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band 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	GSS	GSS	GSS	GSS	GSS	GSS	GSS	GSS	Unit	
		32	33	34	35	36	38	310	315	320		
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
Average Rectified Output Current @ 60Hz Sine Wave, Resistance Load, T _A (FIG.1)	I _O	3.0									A	
Forward Surge Current (Non-Repetitive) @ 60Hz Half-Sine Wave, 1 Cycle, T _A =25°C	I _{FSM}	80									A	
Thermal Resistance, Junction to Ambient ¹	R _{θJA}	55									°C/W	
Thermal Resistance, Junction to Lead ¹	R _{θJL}	17										
Storage Temperature	T _{STG}	-55 to +150									°C	
Junction Temperature	T _J	-55 to +150					-55 to +175					°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Condition	GSS	GSS	GSS	GSS	GSS	GSS	GSS	GSS	Unit		
			32	33	34	35	36	38	310	315		320	
Maximum Instantaneous Forward Voltage Drop	V _F	I _{FM} =3.0A	0.55			0.70		0.85		0.95		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _A =25°C	0.5					0.10					mA
		T _A =100°C	10					5.0					

Note:

1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16mm x16 mm) copper pad areas.

Typical Characteristics Curves

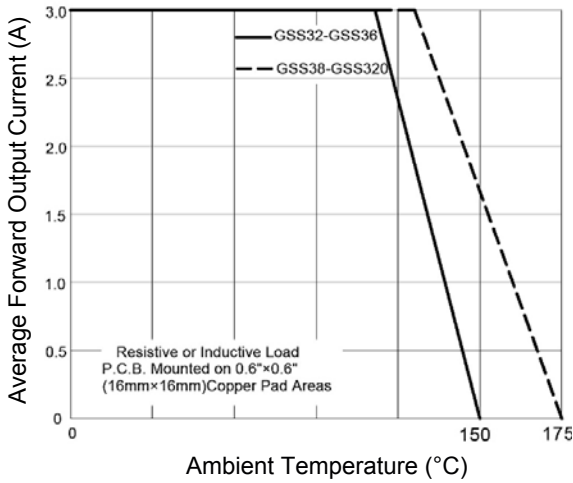


Figure 1. I_O - T_A Curve

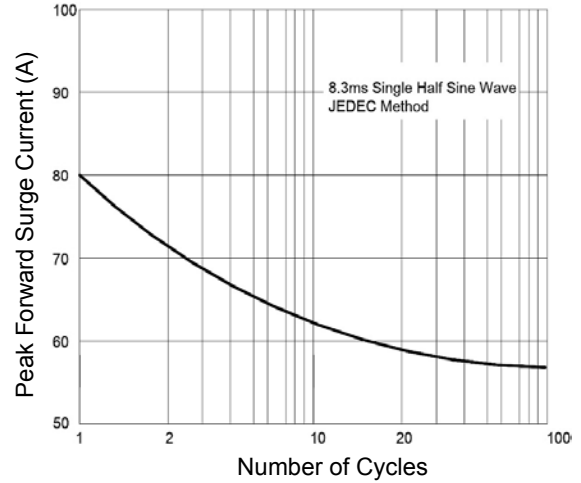


Figure 2. Forward Surge Current Capability

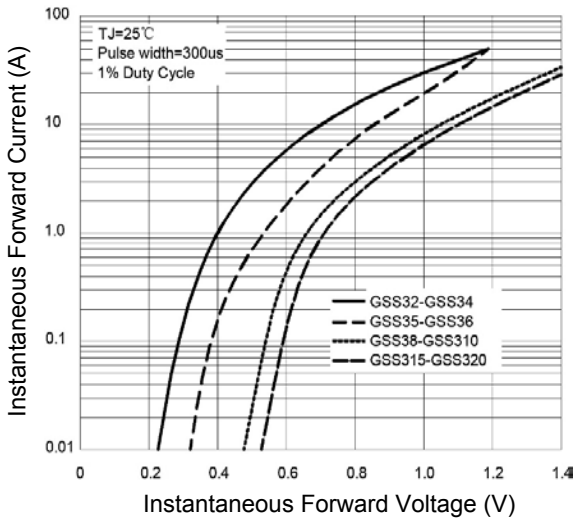


Figure 3. Forward Voltage

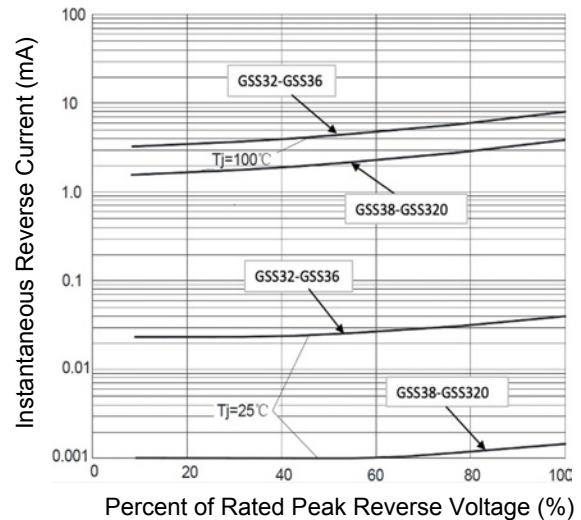
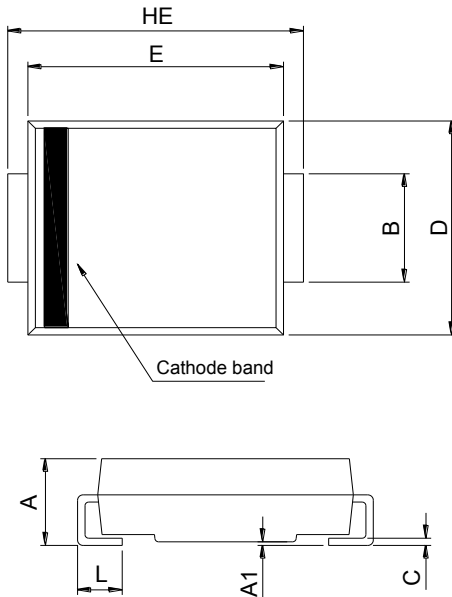


Figure 4. Typical Reverse Characteristics

GSS32 thru GSS320

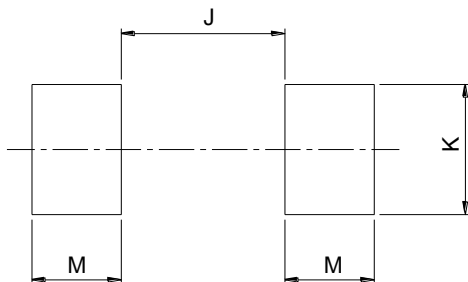
Surface Mount Schottky Rectifiers
 Reverse Voltage 20V to 200V Forward Current 3.0A

Package Outline Dimensions DO-214AB (SMC)



SMC (DO-214AB)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.00	2.62	0.079	0.103
A1	0.00	0.20	0.000	0.008
B	2.90	3.20	0.114	0.126
C	0.15	0.31	0.006	0.012
D	5.58	6.22	0.220	0.245
E	6.60	7.15	0.260	0.281
HE	7.75	8.15	0.305	0.321
L	0.76	1.60	0.030	0.063

Recommended Pad Layout



SMC Recommended Pad Layout (Reference ONLY)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	4.60	-	0.181
K	3.20	-	0.126	-
M	2.00	-	0.079	-

Order Information

Device	Package	Marking	Carrier	Quantity
GSS32	DO-214AB (SMC)	SS32	Tape & Reel	3,000 Pcs / Reel
GSS33	DO-214AB (SMC)	SS33	Tape & Reel	3,000 Pcs / Reel
GSS34	DO-214AB (SMC)	SS34	Tape & Reel	3,000 Pcs / Reel
GSS35	DO-214AB (SMC)	SS35	Tape & Reel	3,000 Pcs / Reel
GSS36	DO-214AB (SMC)	SS36	Tape & Reel	3,000 Pcs / Reel
GSS38	DO-214AB (SMC)	SS38	Tape & Reel	3,000 Pcs / Reel
GSS310	DO-214AB (SMC)	SS310	Tape & Reel	3,000 Pcs / Reel
GSS315	DO-214AB (SMC)	SS315	Tape & Reel	3,000 Pcs / Reel
GSS320	DO-214AB (SMC)	SS320	Tape & Reel	3,000 Pcs / Reel

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