

Features

- Glass passivated chip junction
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Add suffix "E" for Halogen Free
- Halogen-free according to IEC 61249-2-21 definition
- AEC-Q101 qualified
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



RoHS
COMPLIANT



DO-214AB(SMC)

Typical Applications

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)									
Parameter	Symbol	GN3A	GN3B	GN3D	GN3G	GN3J	GN3K	GN3M	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average output rectified current	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	100							A
Rating for fusing($t < 8.3ms$)	I^2t	41.7							A ² sec
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)										
Parameter	Test Conditions	Symbol	GN3A	GN3B	GN3D	GN3G	GN3J	GN3K	GN3M	Unit
Maximum instantaneous forward voltage	$I_F=3.0A$ $T_A=25^\circ C$	V_F					1.15			Volts
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ C$	I_R					10.0			μA
	$T_A=125^\circ C$						250			
Typical reverse recovery time	$I_F=0.5A, I_R=1.0A,$ $I_{RR}=0.25A$	t_{rr}					1.8			μs
Typical junction capacitance	4.0 V, 1 MHz	C_J					60			pF

Thermal Characteristics

Parameter	Symbol	GN3A	GN3B	GN3D	GN3G	GN3J	GN3K	GN3M	Unit	
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$					47				°C/W
	$R_{\theta JI}$					13				

Notes:1. The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 8x8mm copper pads, 2 OZ, FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

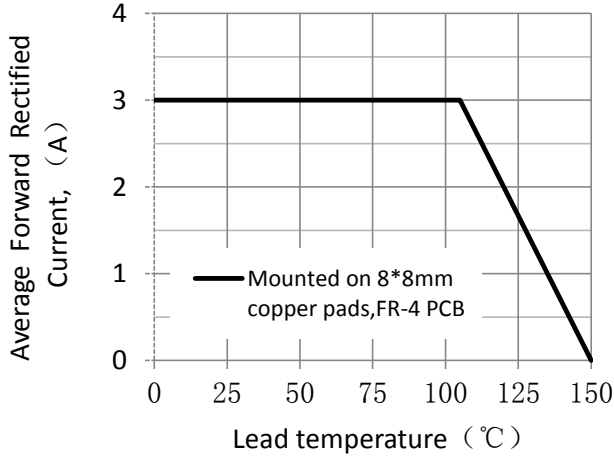


Figure 1. Forward Current Derating Curve

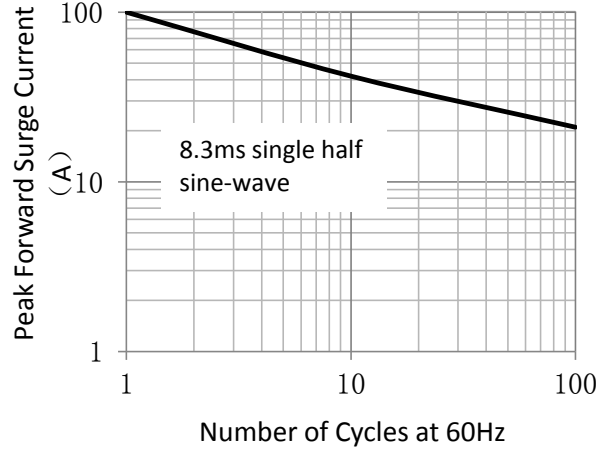


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

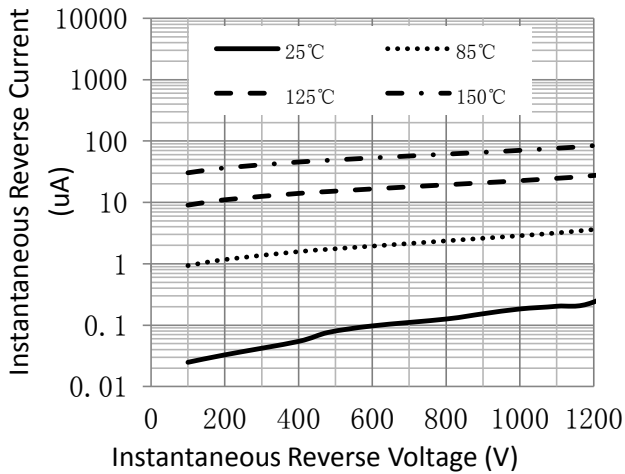


Figure 3. Typical Reverse Characteristics

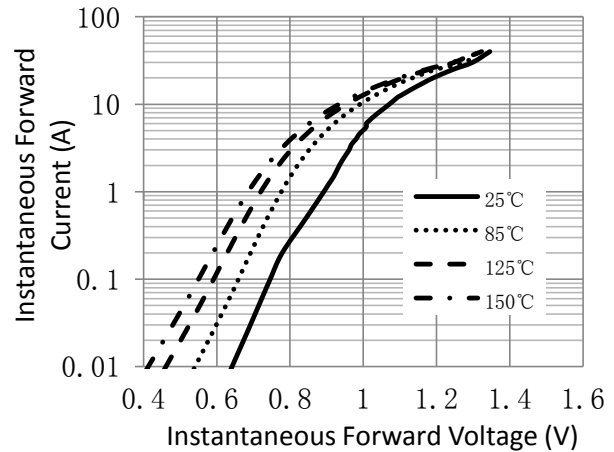


Figure 4. Typical Instantaneous Forward Characteristics

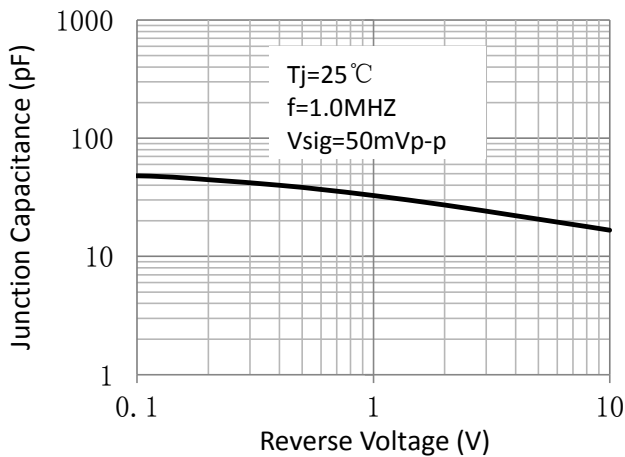
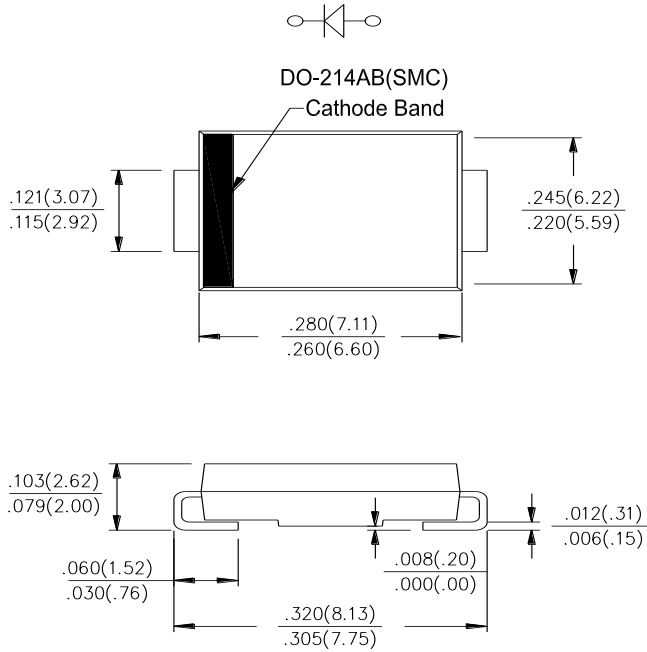


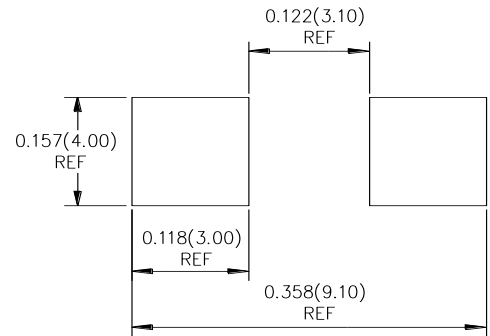
Figure 5. Typical Junction Capacitance

Package Outline Dimensions

in inches (millimeters)



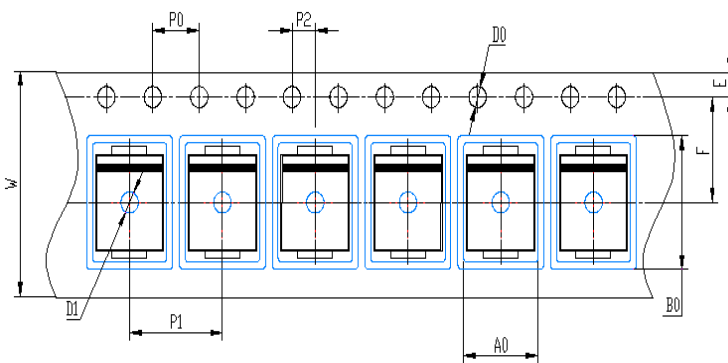
Mounting Pad Layout



Packing Information

3000 pcs/Reel, 14 Reels/Box; 16mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMC(mm)
W	16±0.2
E	1.75±0.1
F	7.5±0.05
D0	1.5±0.1
D1	1.50 +0.1/-0
P0	4.0±0.1
P1	8.0±0.1
P2	2.0±0.05
A0	6.22±0.1
B0	8.31±0.1



GN3A thru GN3M

Surface Mount Glass Passivated Standard Rectifiers
Reverse Voltage 50 to 1000V Forward Current 3A

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