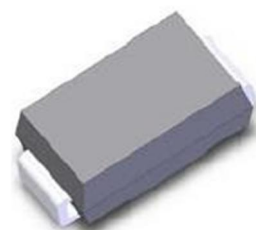


Features

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



DO-214AC(SMA)

Typical Applications

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

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	AGN1A	AGN1B	AGN1D	AGN1G	AGN1J	AGN1K	AGN1M	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	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	40							A
Rating for fusing($t < 8.3ms$)	I^2t	6.7							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	AGN1A	AGN1B	AGN1D	AGN1G	AGN1J	AGN1K	AGN1M	Unit
Maximum instantaneous forward voltage	I _F =1.0A T _A =25°C	V _F	0.99							Volts
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C	I _R	5.0							µA
	T _A =125°C		50							
Typical reverse recovery time	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	t _{rr}	1.8							uS
Typical junction capacitance	4.0 V, 1 MHz	C _J	6							pF

Thermal Characteristics

Parameter	Symbol	AGN1A	AGN1B	AGN1D	AGN1G	AGN1J	AGN1K	AGN1M	Unit
Typical thermal resistance ⁽¹⁾	R _{θJA}	68							°C/W
	R _{θJL}	10							

Notes:1. The thermal resistance from junction to ambient and lead, mounted on P.C.B with 5x5mm copper pads, 2 OZ, FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

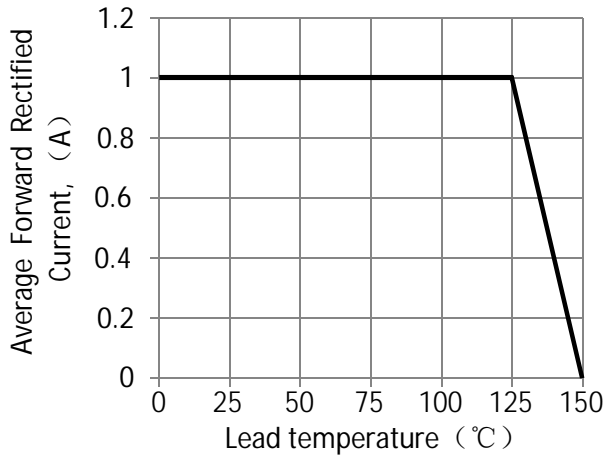


Figure 1. Forward Current Derating Curve

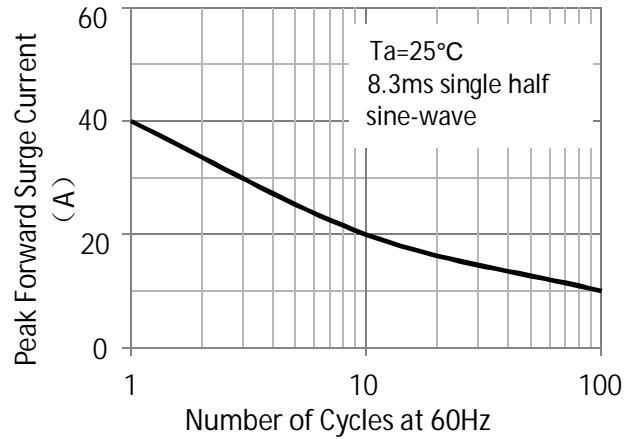


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

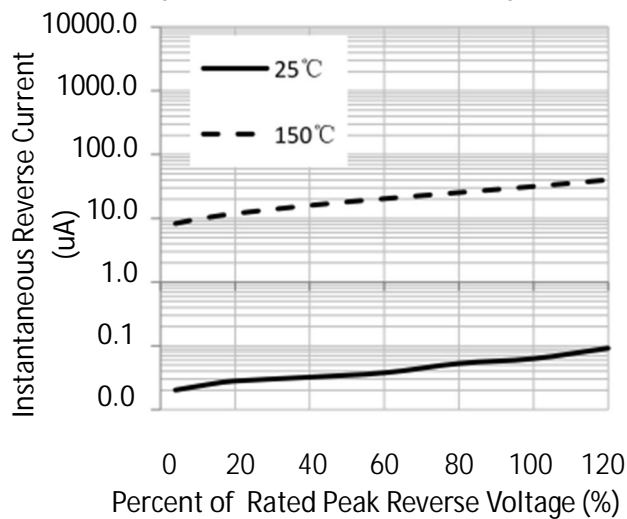


Figure 3. Typical Reverse Characteristics

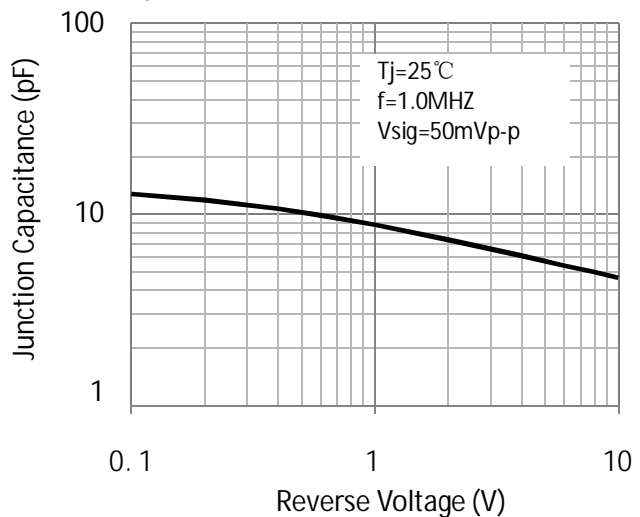


Figure 4. Typical Junction Capacitance

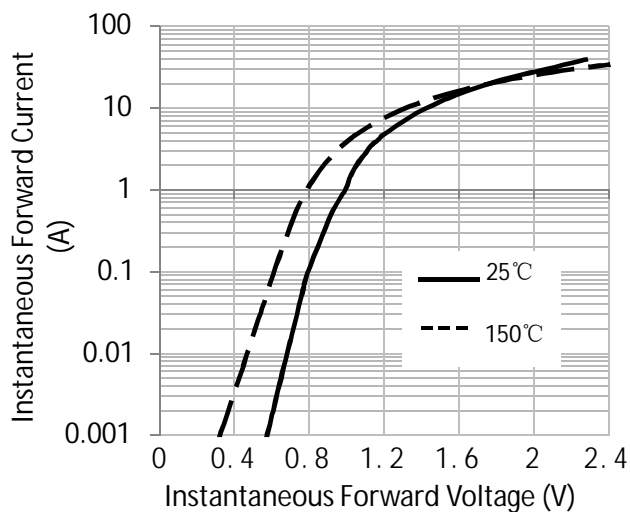
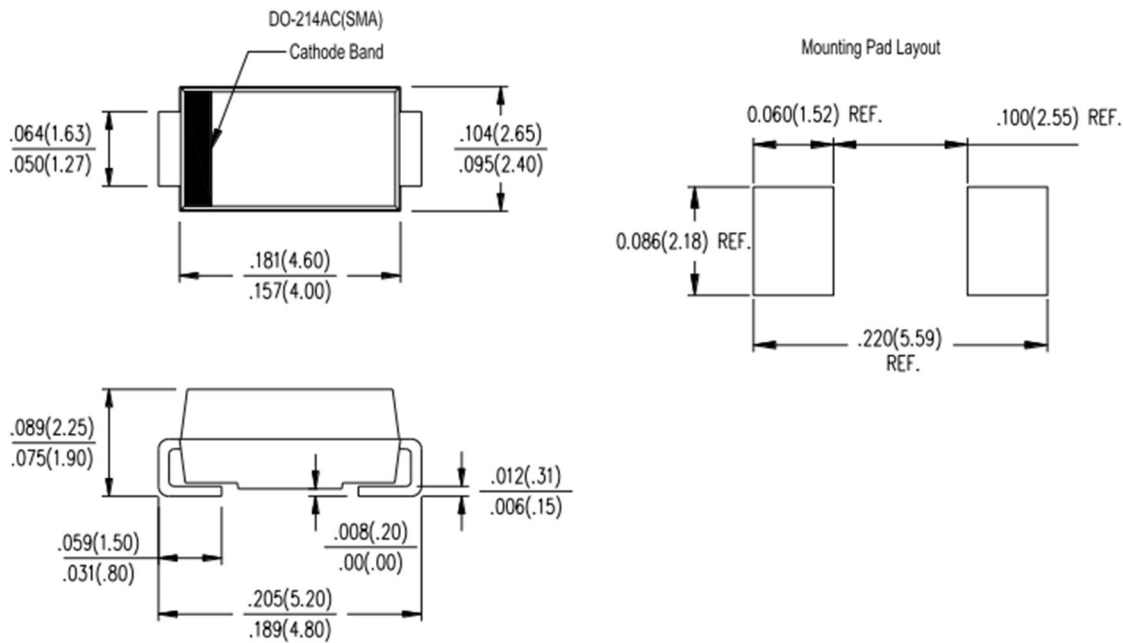


Figure 5. Typical Instantaneous Forward Characteristics

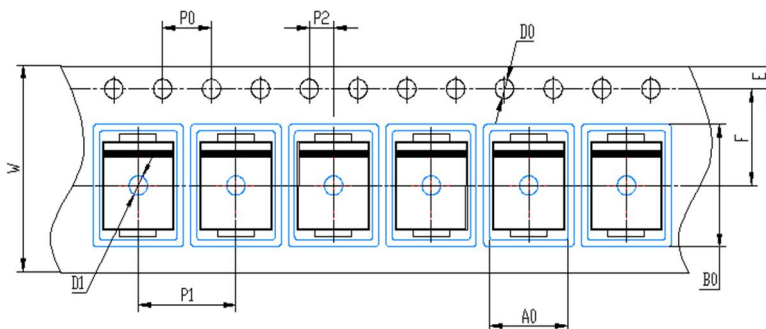
Package Outline Dimensions



Packing Information

7500 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMA(mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1



AGN1A thru AGN1M

Surface Mount Glass Passivated Standard Rectifiers
Reverse Voltage 50 to 1000V Forward Current 1A

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