

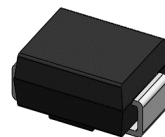
3A,200-1000V Standard Rectifiers

Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition
- High temperature soldering guaranteed: 260°C/10 seconds
- AEC-Q101 qualified



RoHS
COMPLIANT



SMB (DO-214AA)

Applications

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

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

Parameter	Symbol	AGN3DB	AGN3GB	AGN3JB	AGN3KB	AGN3MB	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	3					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	100					A
Operating junction temperature range	T _J	-55 to +150					°C
Storage temperature range	T _{STG}	-55 to +150					°C

Thermal-Mechanical Specifications (T_A=25°C unless otherwise noted)

Parameter	Symbol	Typ	Unit
Thermal Resistance, Junction to Ambient	R _{thJA}	85	°C /W
Thermal Resistance, Junction to Case	R _{thJC}	15	°C /W
Thermal Resistance, Junction to Lead	R _{thJL}	20	°C /W

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

Parameter	Symbol	Test Conditions	AGN3DB	AGN3GB	AGN3JB	AGN3KB	AGN3MB	Unit
Maximum forward drop voltage	V _F	I _F =3A	1.15					V
Maximum reverse leakage current @V _R	I _R	T _J =25°C	10					uA
		T _J =125°C	250					
Typical junction capacitance	C _J	V _R =4.0 V f=1 MHZ	22					pF
Maximum reverse recovery time	trr	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	3					uS

Note:

1. Mounted on copper pad area of 0.2x0.2" (5.0 x 5.0mm) to each terminal.

Ratings and Characteristics Curves (T_A = 25°C unless otherwise noted)

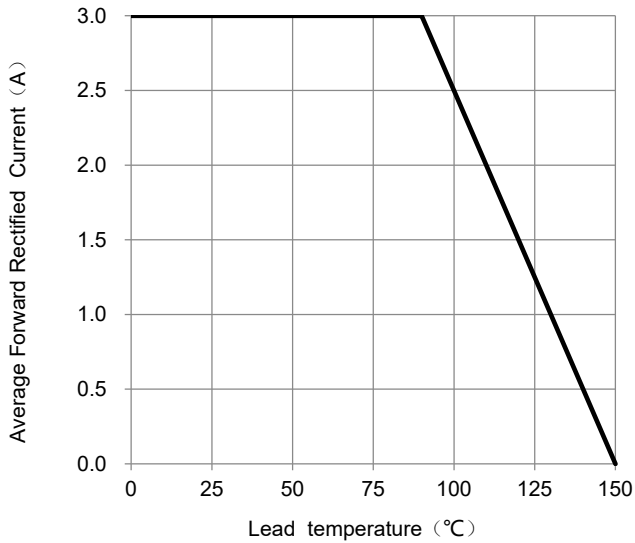


Fig.1 -Forward Current Derating Curve

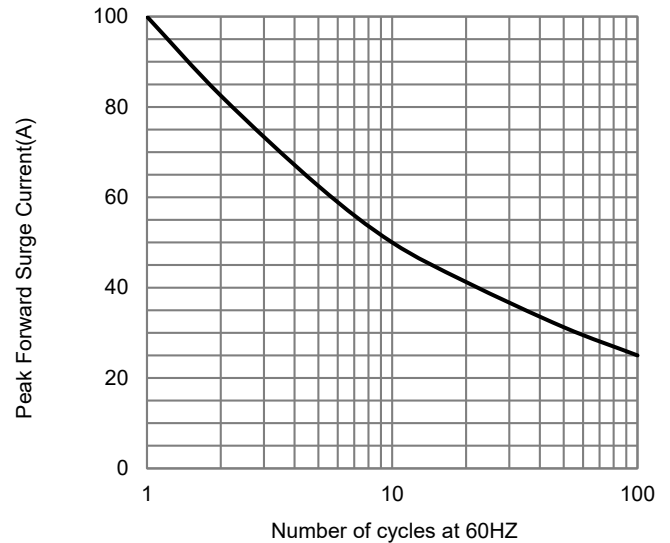


Fig.2 - Maximum Non-Repetitive Surge Current

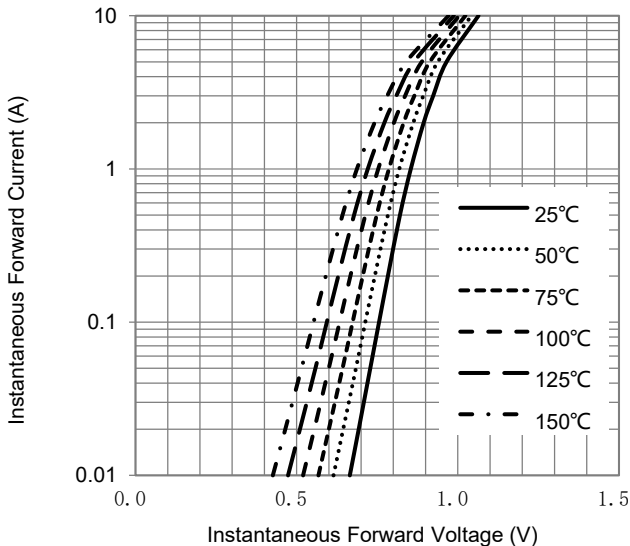


Fig.3 -Typical Forward Voltage Characteristics

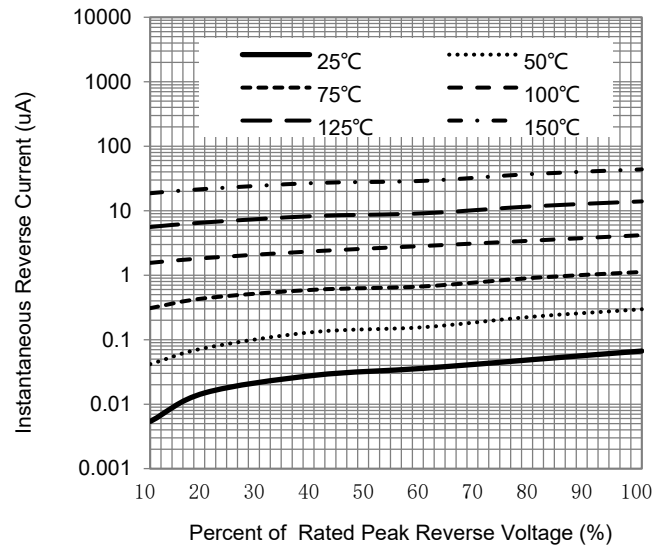


Fig.4 -Typical Reverse Current Characteristics

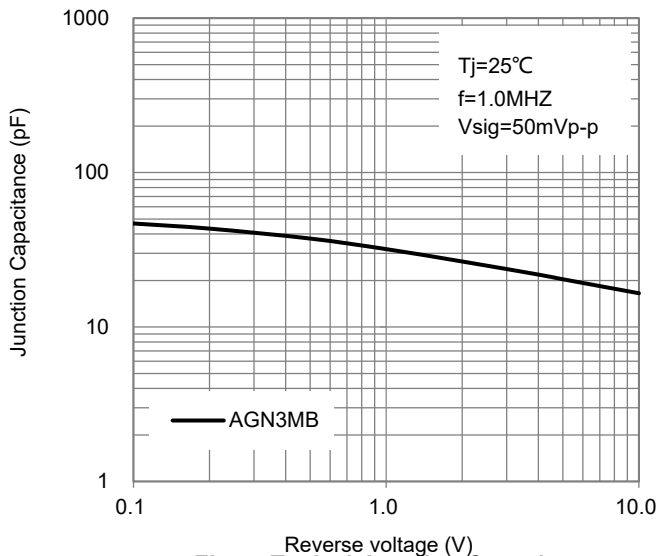
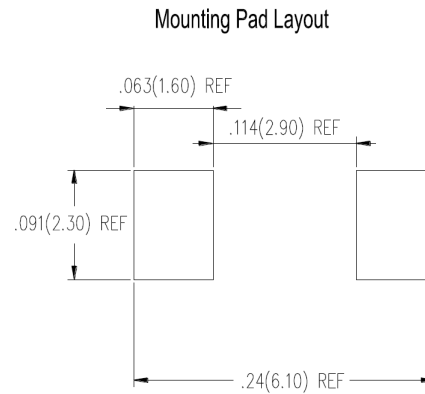
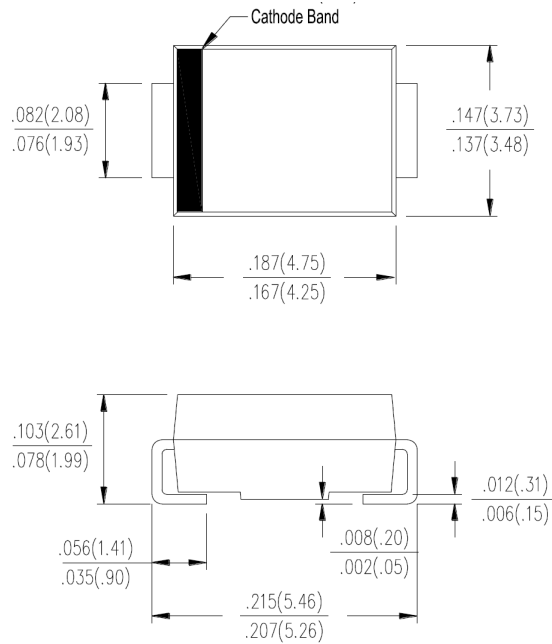


Fig.5 -Typical Junction Capacitance

Package Outline Dimensions

in inches (millimeters)

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