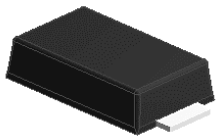
2A,200-1000V Standard Rectifiers

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℃/10 seconds
- AEC-Q101 qualified

RoHS
COMPLIANT



eSGB (DO-221AC)

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℃ unless otherwise noted)

Parameter	Symbol	AGN2DL	AGN2GL	AGN2JL	AGN2KL	AGN2ML	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	$I_{F(AV)}$	2					A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load per diode	I_{FSM}	55					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℃ 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}	18	°C /W

Electrical Specifications(T_A=25℃ unless otherwise noted)								
Parameter	**Symbol**	**Test Conditions**	**AGN2DL**	**AGN2GL**	**AGN2JL**	**AGN2KL**	**AGN2ML**	**Unit**
Maximum forward drop voltage	V_F	I_F=2A	1.1					V
Maximum reverse leakage current @V_R	I_R	T_J =25℃	5					uA
		T_J =125℃	50					
Typical junction capacitance	C_J	V_R = 4.0 V f=1 MHZ	11					pF
Typical reverse recovery time	trr	I_F=0.5A, I_R=1.0A, I_{RR}=0.25A	2.5					uS

Note：

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

Ratings and Characteristics Curves (TA = 25℃ unless otherwise noted)

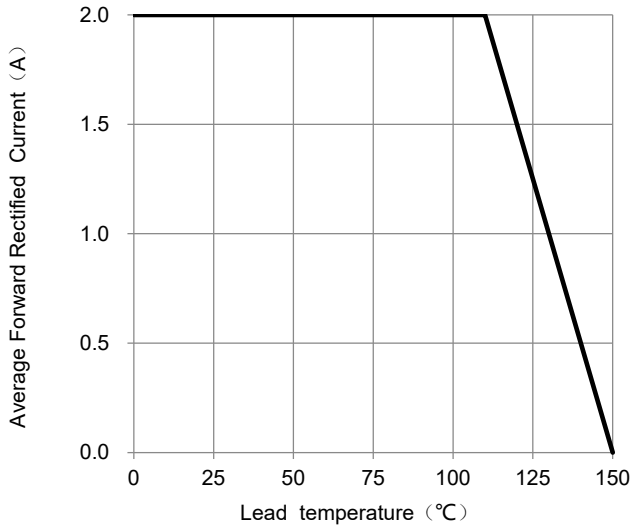


Fig.1 –Forward Current Derating Curve

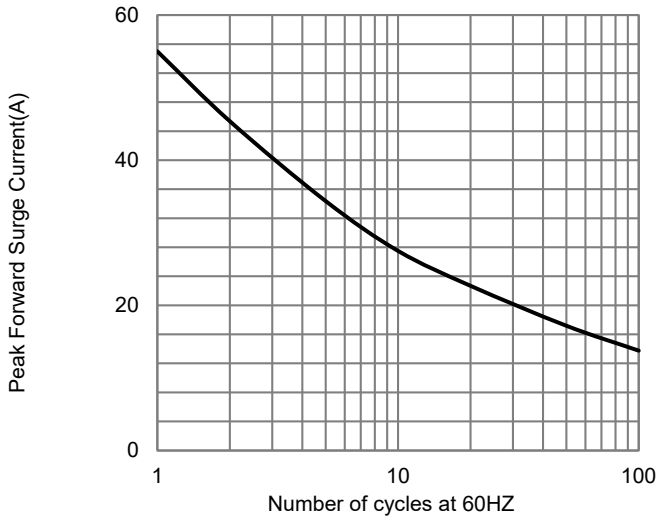


Fig.2 – Maximum Non-Repetitive Surge Current

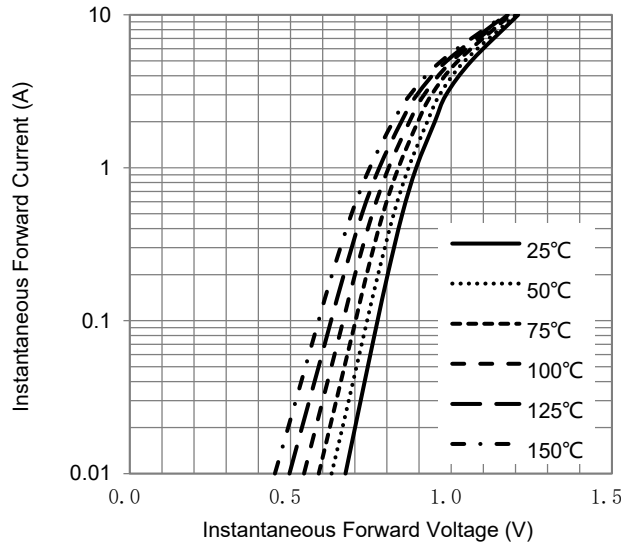


Fig.3 –Typical Forward Voltage Characteristics

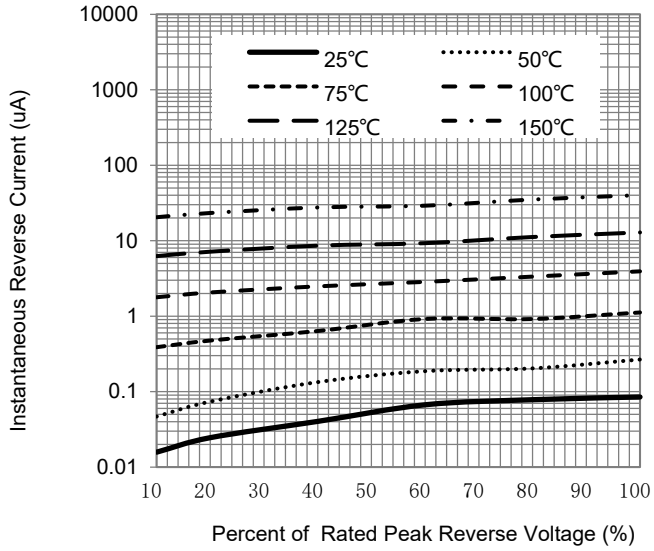


Fig.4 –Typical Reverse Current Characteristics

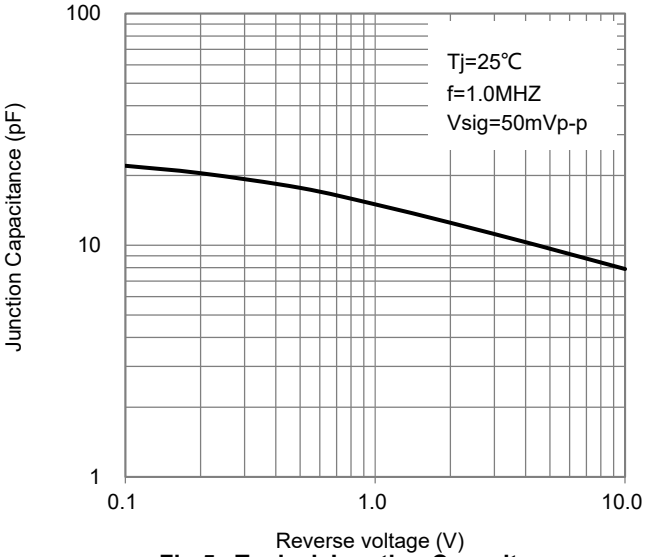
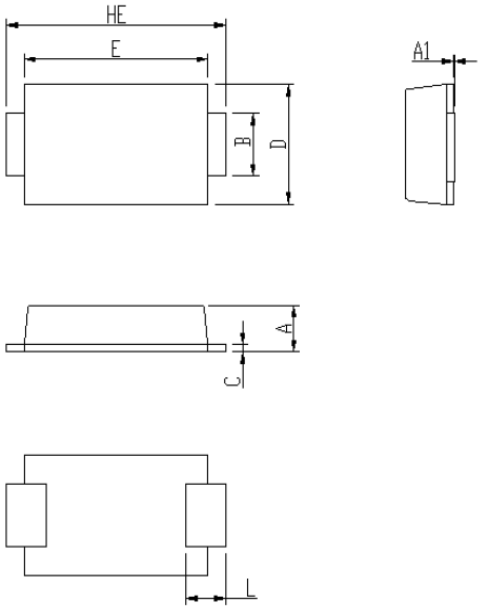


Fig.5 –Typical Junction Capacitance

Package Outline Dimensions

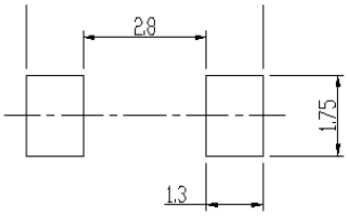
in inches (millimeters)

eSGB (DO-221AC)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.92	1.08	0.036	0.043
A1	0	0.1	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint



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