

**SURFACE MOUNT  
GLASS PASSIVATED RECTIFIER**

**REVERSE VOLTAGE – 50 to 1000 Volts  
FORWARD CURRENT – 1.0 Ampere**

**FEATURES**

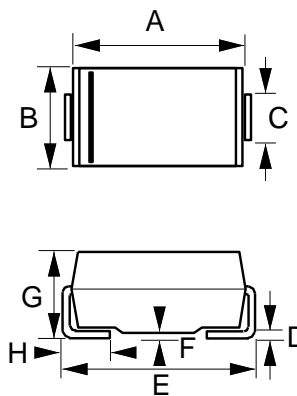


- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- ROHS compliant
- AEC-Q101 qualified
- PPAP capable
- Automotive grade

**MECHANICAL DATA**

- Case: Molded plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.), “Halogen-free”
- Polarity: Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams

**SMA**



SMA		
DIM.	MIN.	MAX
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	1.96	2.40
H	0.76	1.52
All dimension in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	AS1A	AS1B	AS1D	AS1G	AS1J	AS1K	AS1M	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 forward rectified current @ $T_L=100^\circ C$ @ $T_C=100^\circ C$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3 ms single half sine-wave super imposed on rated load. ( JEDEC METHOD)	$I_{FSM}$	30							A
Maximum forward voltage at 1.0A DC	$V_F$	1.1							V
Maximum DC reverse current at Rated DC blocking voltage @ $T_J=25^\circ C$ @ $T_J=125^\circ C$	$I_R$	5.0 100							uA
Typical Reverse Recovery Time (Note 1)	$T_{RR}$	1300							ns
Typical junction capacitance (Note 2)	$C_J$	10							pF
Typical thermal resistance (Note 3)	$R_{thJL}$ $R_{thJC}$	30							$^\circ C/W$
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

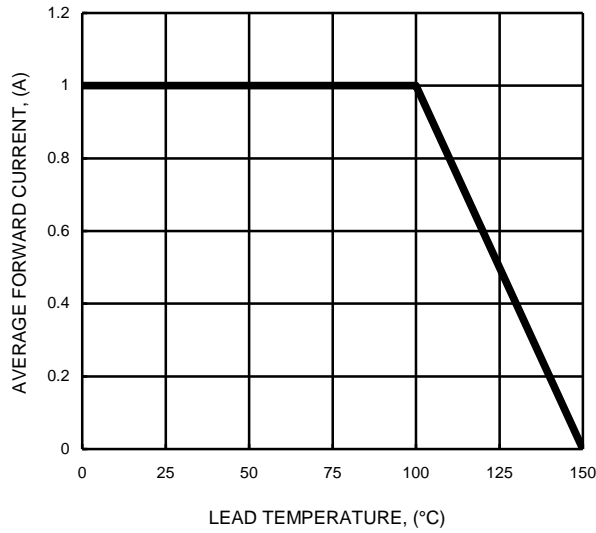
REV.1, Oct-2017, KSDA09

**NOTES :**

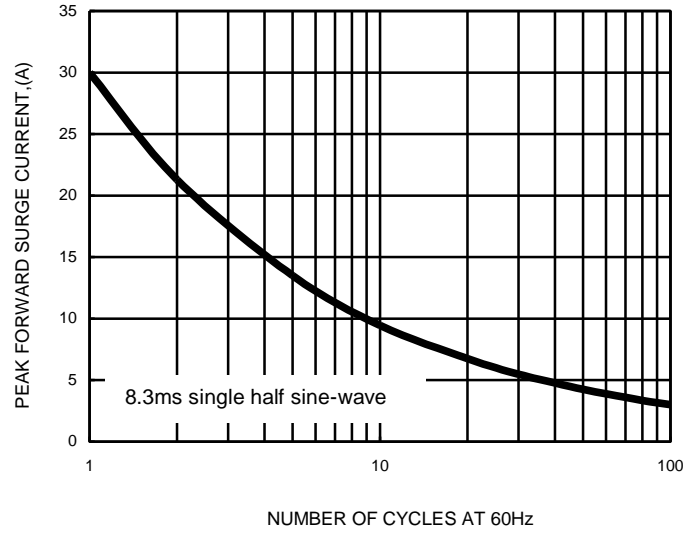
- 1.Reverse Recovery Test Conditions : $I_F=0.5A,I_R=1.0A,I_{RR}=0.25A$ .
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3.Thermal Resistance Junction to Lead and Case.

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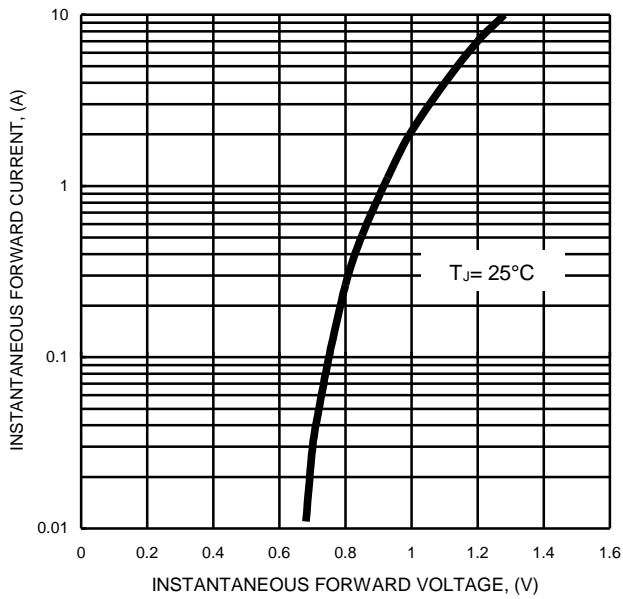
**FIG.1- FORWARD CURRENT DERATING CURVE**



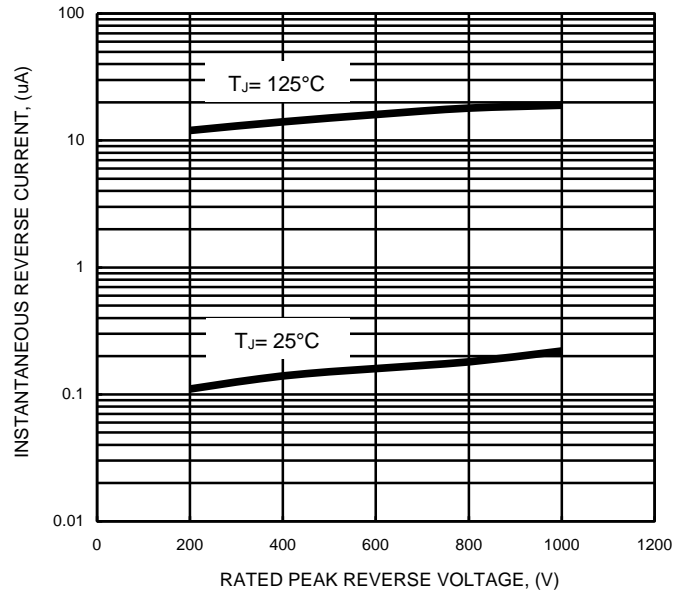
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS**



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