

**SURFACE MOUNT  
GLASS PASSIVATED RECTIFIERS**

**REVERSE VOLTAGE –50 to 1000 Volts  
FORWARD CURRENT – 3.0 Amperes**

**FEATURES**

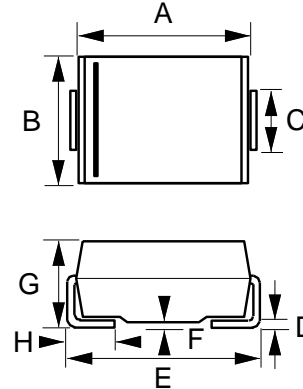
- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- ROHS compliant
- AEC-Q101 qualified
- PPAP capable
- Automotive grade



**MECHANICAL DATA**

- Case: Molded plastic
- Case Material molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity: Color band denotes cathode
- Weight : 0.007 ounces, 0.21 grams

**SMC**



SMC		
DIM.	MIN.	MAX
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	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	AS3A	AS3B	AS3D	AS3G	AS3J	AS3K	AS3M	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 @ $T_L=75^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3 ms single half sine-wave super imposed on rated load. ( JEDEC METHOD)	$I_{FSM}$	100							A
Maximum forward voltage at 3.0A DC	$V_F$	1.15							V
Maximum DC reverse current @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	$I_R$	10 250							uA
Typical Reverse Recovery Time (Note 1)	$T_{RR}$	2000							ns
Typical junction capacitance (Note 2)	$C_J$	40							pF
Typical thermal resistance (Note 3)	$R_{thJL}$	10							°C/W
Typical thermal resistance (Note 4)	$R_{thJA}$	50							°C/W
Operating temperature range	$T_J$	-55 to +150							°C
Storage temperature range	$T_{STG}$	-55 to +150							°C

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**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
4. Thermal Resistance Junction to Ambient.

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FIG.1- FORWARD CURRENT DERATING CURVE

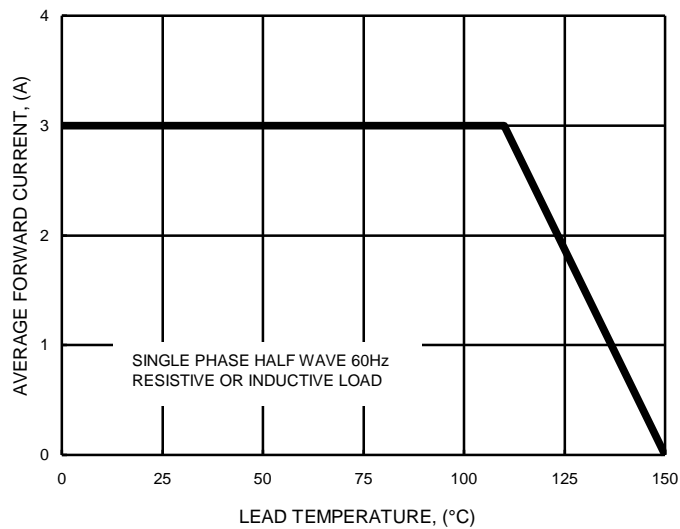


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

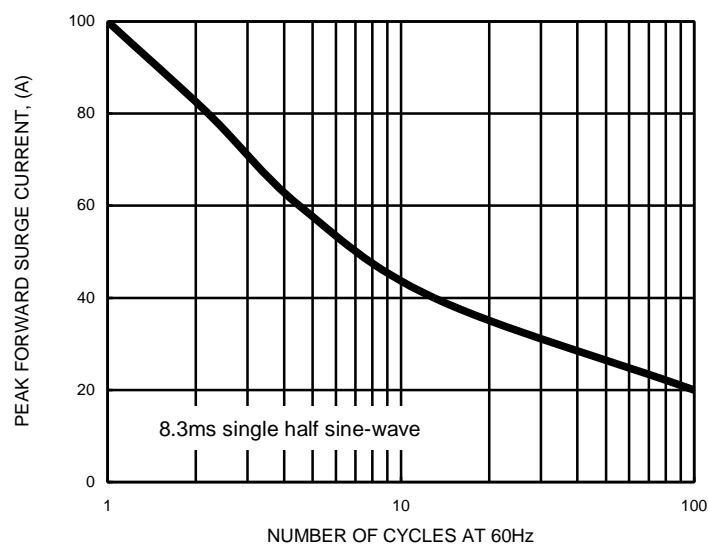


FIG.3- TYPICAL FORWARD CHARACTERISTICS

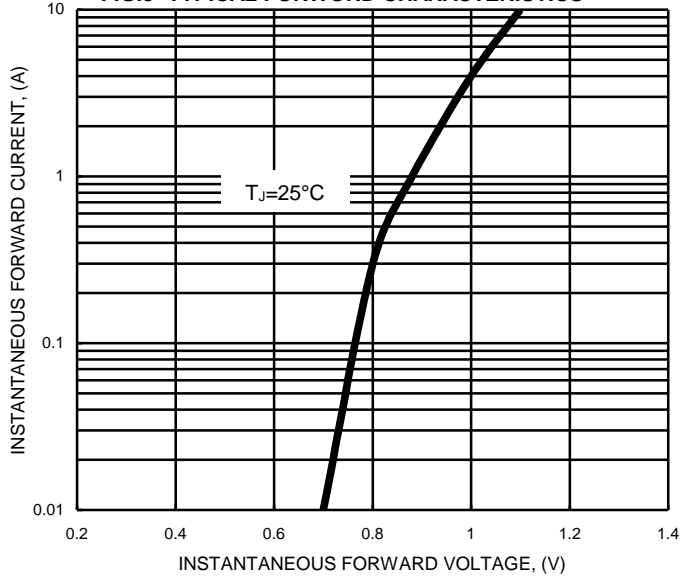
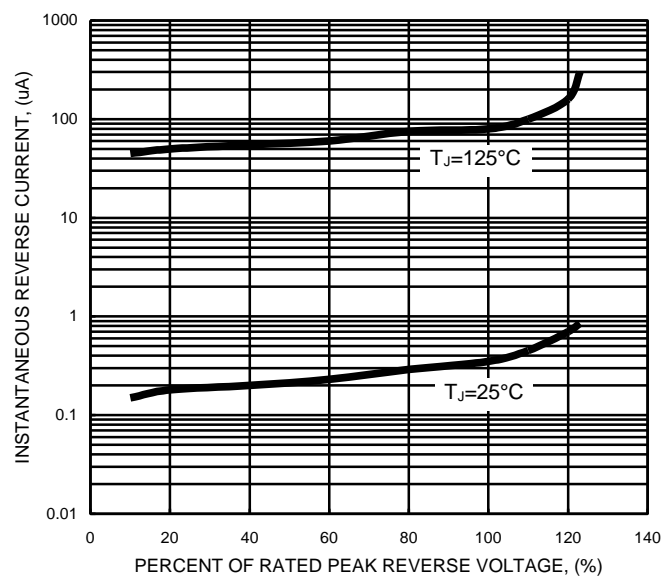


FIG.4- TYPICAL REVERSE CHARACTERISTICS



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