LITE-ON SEMICONDUCTOR

AS2A thru AS2M

SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE –50 to 1000 Volts FORWARD CURRENT – 1.5 Amperes

AUTOMOTIVE

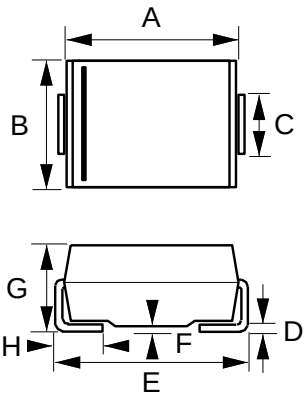
FEATURES

- 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 : 0.003 ounces, 0.093 grams

SMB



SMB		
DIM.	MIN.	MAX
A	4.06	4.57
B	3.30	3.94
C	1.96	2.21
D	0.15	0.31
E	5.21	5.59
F	0.05	0.20
G	2.01	2.50
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	AS2A	AS2B	AS2D	AS2G	AS2J	AS2K	AS2M	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°C	$I_{F(AV)}$	1.5							A
Peak forward surge current 8.3 ms single half sine-wave super imposed on rated load. (JEDEC METHOD) @ 8.3ms @ 1ms	I_{FSM}	50 100							A
Maximum forward voltage at 1.5A DC	V_F	1.15							V
Maximum DC reverse current at Rated DC blocking voltage @ T_J=25°C @ T_J=125°C	I_R	5.0 125							uA
Typical Reverse Recovery Time (Note 1)	T_{RR}	1500							ns
Typical junction capacitance (Note 2)	C_J	20							pF
Typical thermal resistance (Note 3)	$RthJ_L$	20							°C/W
Operating temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

REV.1, Oct-2017, KSDB10

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

RATING AND CHARACTERISTIC CURVES
AS2A thru AS2M

FIG.1- FORWARD CURRENT DERATING CURVE

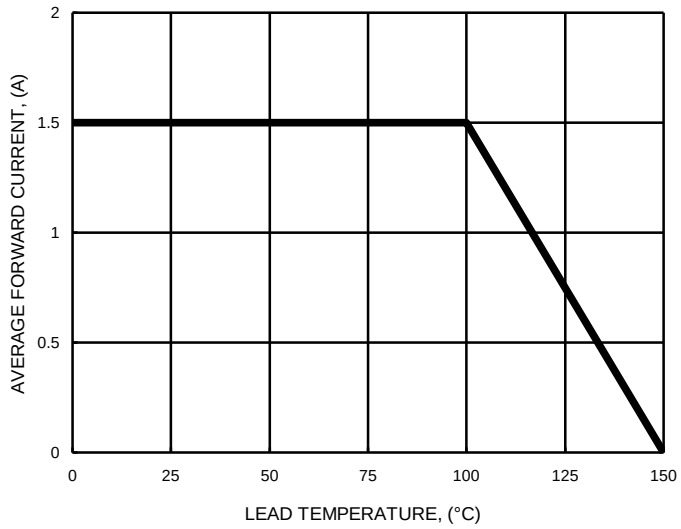


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

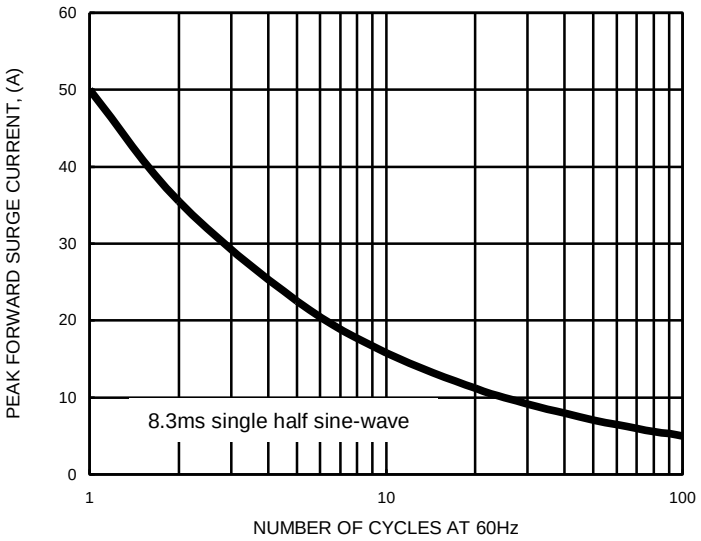


FIG.3- TYPICAL FORWORD CHARACTERISTICS

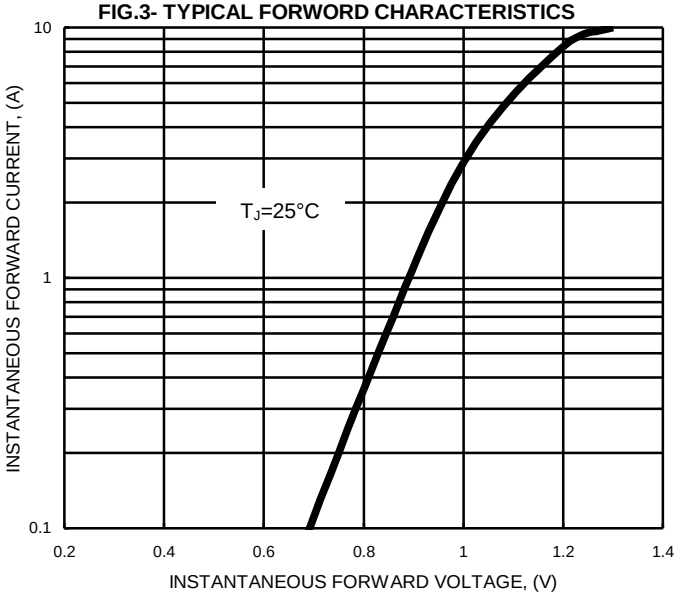
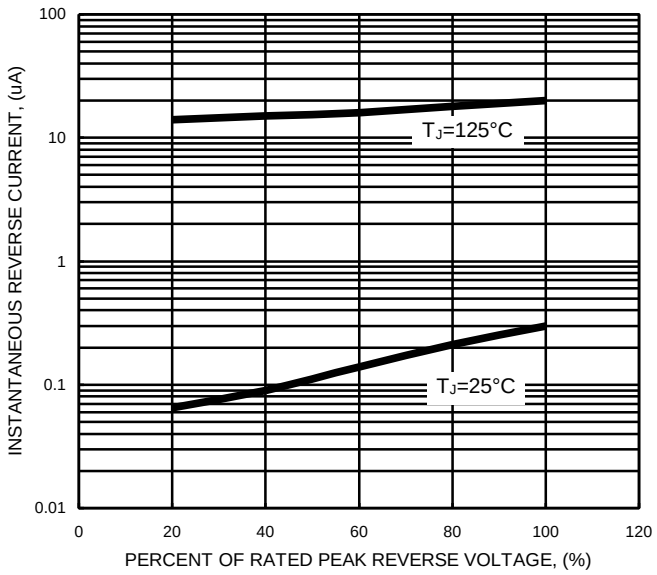


FIG.4- TYPICAL REVERSE CHARACTERISTICS



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