

**SURFACE MOUNT
FAST RECOVERY RECTIFIERS**

REVERSE VOLTAGE - **600** Volts
FORWARD CURRENT - **1.5** Amperes

FEATURES

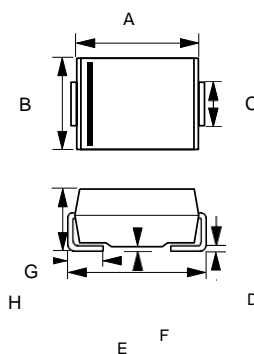
- Fast switching for high efficiency
- For surface mounted applications
- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- ROHS compliant
- AEC-Q101 qualified
- PPAP capable
- Automotive grade



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 gram

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 Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	ARS2J	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current @TL=90 C	$I_{(AV)}$	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	50	A
Maximum forward Voltage at 1.5A DC	V_F	1.3	V
Maximum DC Reverse Current @TJ=25 C at Rated DC Blocking Voltage @TJ=125 C	I_R	5.0 200	uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	250	ns
Typical Junction Capacitance (Note 2)	C_J	30	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	20	°C/W
Operating Temperature Range	T_J	-55 to +175	°C
Storage Temperature Range	T_{STG}	-55 to +175	°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.

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FIG.1- FORWARD CURRENT DERATING CURVE

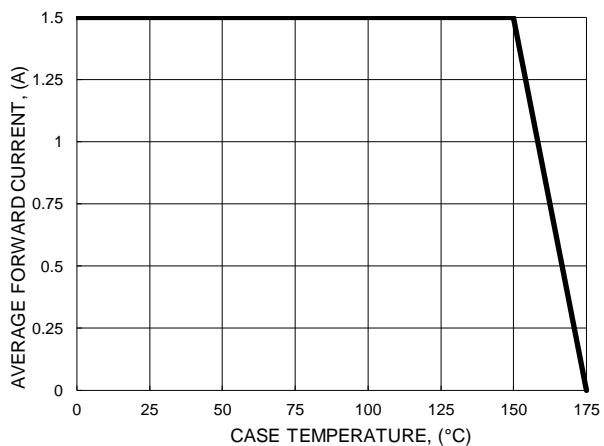


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

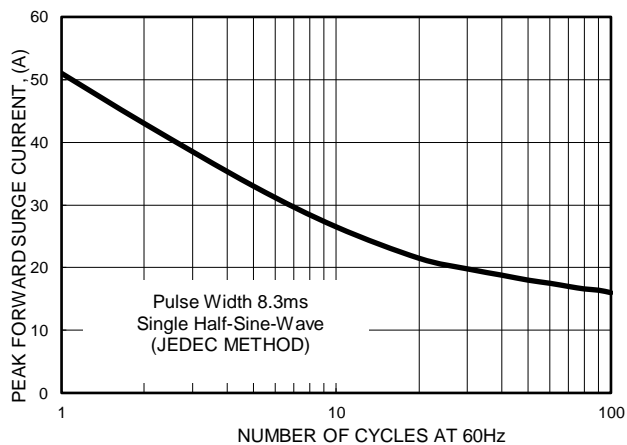


FIG.3- TYPICAL FORDW CHARACTERISTICS

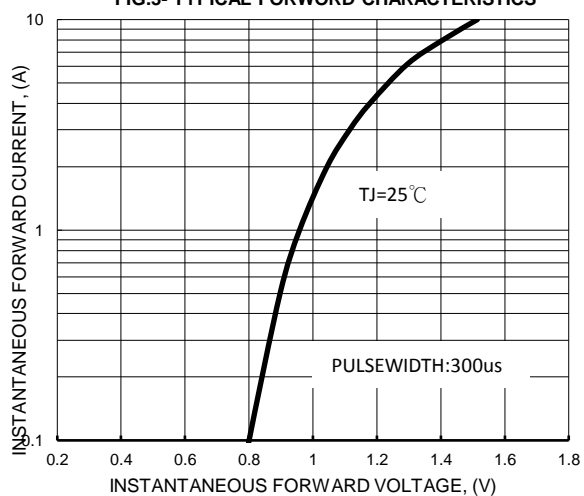
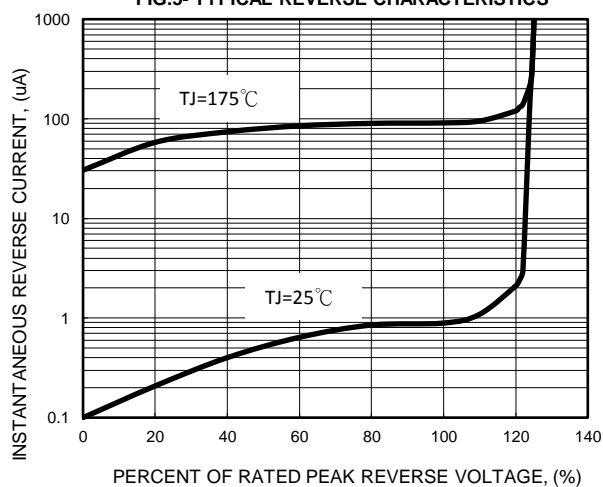


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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