SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts, FORWARD CURRENT - 3.0 Amperes

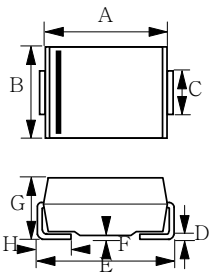
FEATURES

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- 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	2.40
H	0.76	1.52
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified

CHARACTERISTICS		SYMBOL	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	UNIT
Maximum Recurrent 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	@TL =75℃	$I_{(AV)}$	3.0							A
Peak Forward Surge Current (Non-repetitive)	8.3ms single half sine-wave Tj=25℃	I_{FSM}	120							A
	8.3ms single half sine-wave Tj=125℃		100							
	1ms single half sine-wave Tj=25℃		240							
	1ms single half sine-wave Tj=125℃		200							
Maximum forward Voltage at 3.0A DC		V_F	1.15							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TJ =25℃	I_R	10							uA
	@TJ =125℃		250							
I^2t Rating for fusing (3ms ≦ t ≦ 8.3ms)		I^2t	42							A^2S
Typical Junction Capacitance (Note 1)		C_J	40							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JL}$	10							℃/W
Typical Thermal Resistance (Note 3)		$R_{\theta JA}$	50							℃/W
Operating Temperature Range		T_J	-55 to +150							℃
Storage Temperature Range		T_{STG}	-55 to +150							℃

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.
3. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

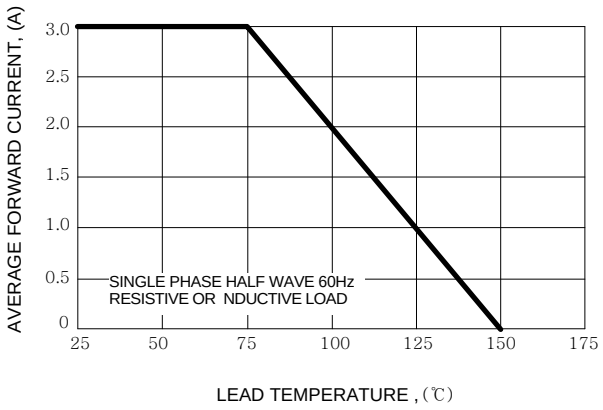


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

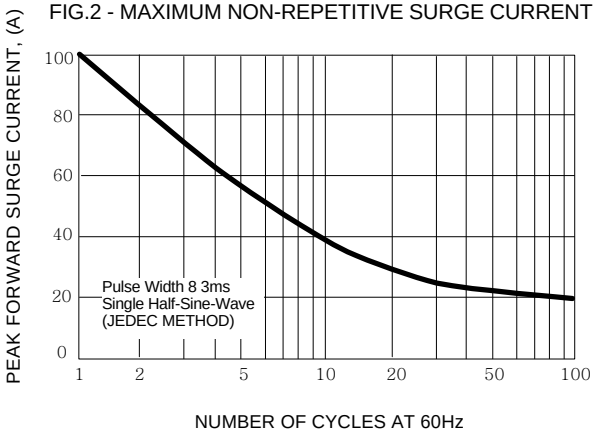


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

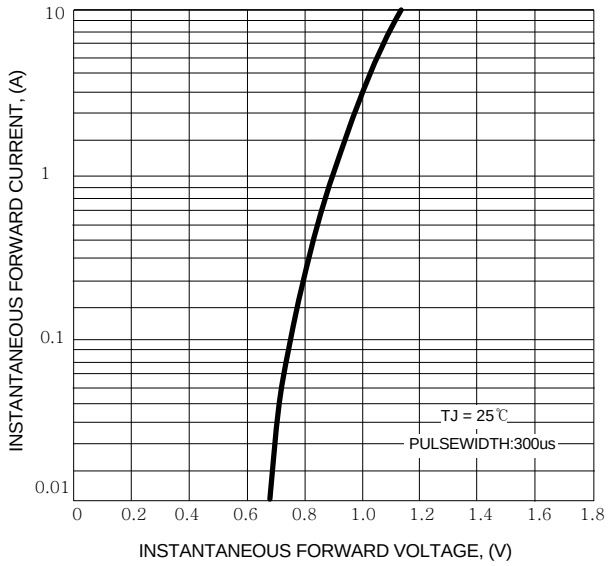


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

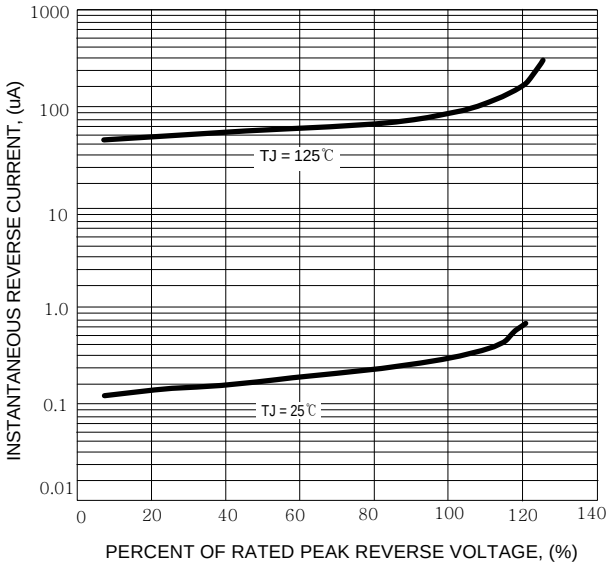


FIG.5 - NON-REPETITIVE SURGE CURRENT