

**SURFACE MOUNT  
GLASS PASSIVATED RECTIFIERS**

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

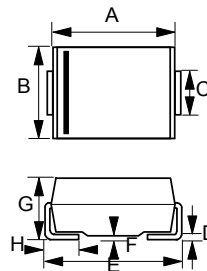
**FEATURES**

- 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°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @TL = 75°C	IAV	3.0							A	
Peak Forward Surge Current (Non-repetitive)	IFSM	8.3ms single half sine-wave Tj=25°C				120				A
		Tj=125°C				100				
		1ms single half sine-wave Tj=25°C				240				
		Tj=125°C				200				
Maximum forward Voltage at 3.0A DC	VF	1.15							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@TJ = 25°C						10		
		@TJ = 125°C						250		
I <sup>2</sup> t Rating for fusing (3ms ≤ t ≤ 8.3ms)	I <sup>2</sup> t	42							A <sup>2</sup> S	
Typical Junction Capacitance (Note 1)	CJ	40							pF	
Typical Thermal Resistance (Note 2)	RθJL	10							°C/W	
Typical Thermal Resistance (Note 3)	RθJA	50							°C/W	
Operating Temperature Range	TJ	-55 to +150							°C	
Storage Temperature Range	TSTG	-55 to +150							°C	

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.

REV. 6, May-2011, KSDB03

FIG.1 - FORWARD CURRENT DERATING CURVE

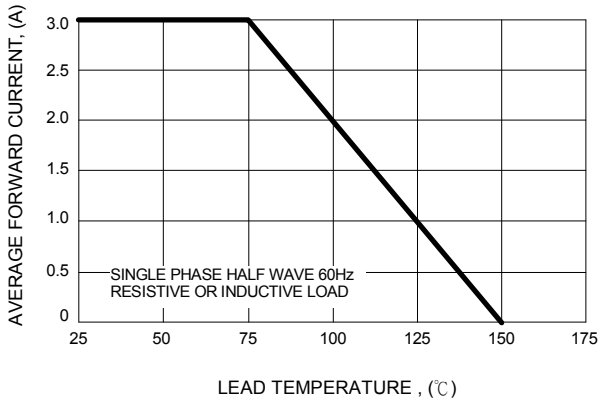


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

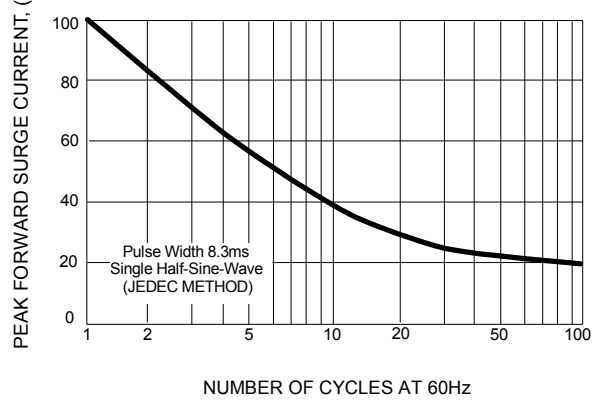


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

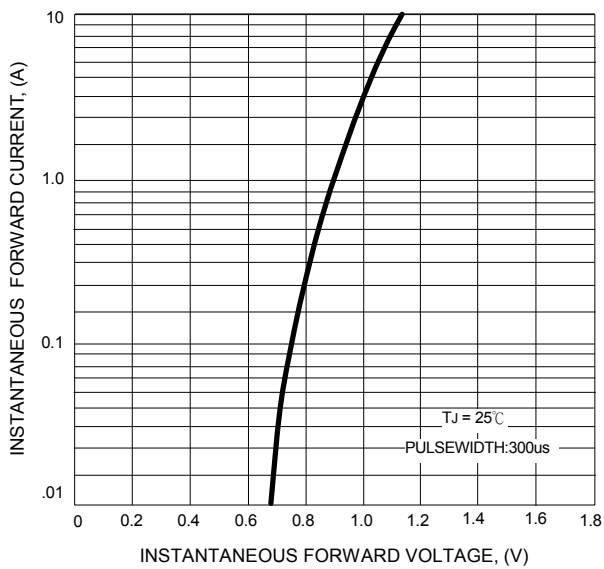


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

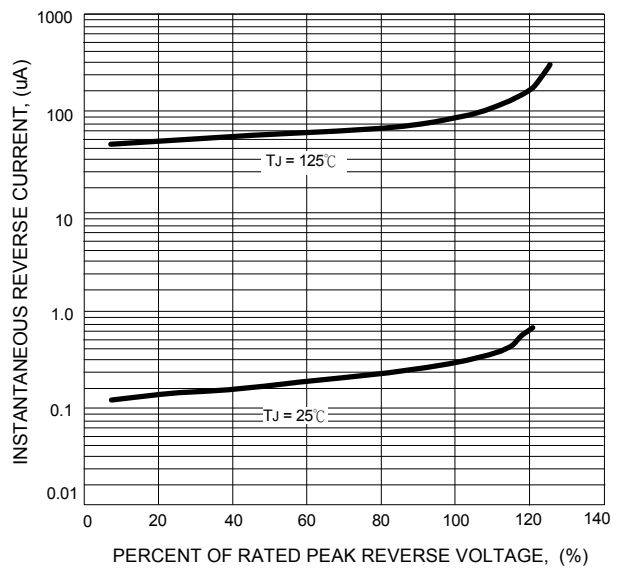
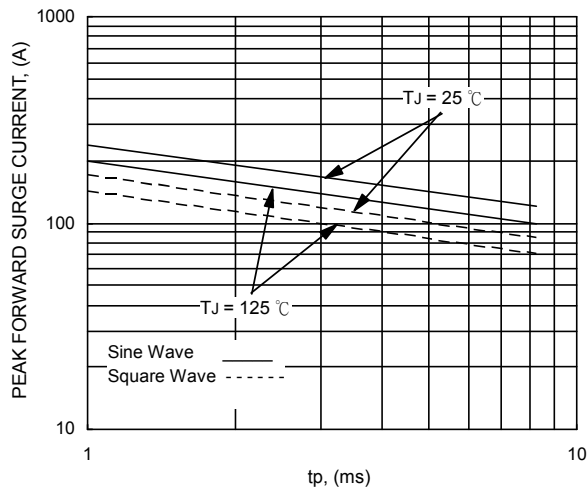


FIG.5 - NON-REPETITIVE SURGE CURRENT



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