

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

REVERSE VOLTAGE - **50 to 400** Volts
FORWARD CURRENT - **3.0** Amperes

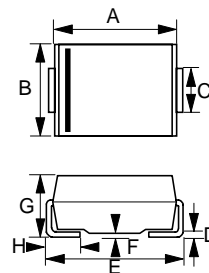
FEATURES

- Glass passivated chip
- Super fast switching for high efficiency
- For surface mounted applications
- Low forward voltage drop and high current capability
- Low reverse leakage current
- 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	2.62
H	0.76	1.52

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	ES3AB	ES3BB	ES3CB	ES3DB	ES3GB	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	400	V	
Maximum RMS Voltage	VRMS	35	70	105	140	280	V	
Maximum DC Blocking Voltage	VDC	50	100	150	200	400	V	
Maximum Average Forward Rectified Current @TL =100°C	I(AV)	3.0						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	IFSM	100						A
Maximum forward Voltage at 3.0A DC	VF	0.92				1.25	V	
Maximum DC Reverse Current @TJ =25°C at Rated DC Blocking Voltage @TJ =125°C	IR	10 500					uA	
Maximum Reverse Recovery Time (Note 1)	TRR	25					ns	
Typical Junction Capacitance (Note 2)	CJ	45					pF	
Typical Thermal Resistance (Note 3)	RθJL	10					°C/W	
Typical Thermal Resistance (Note 4)	RθJA	50					°C/W	
Operating Temperature Range	TJ	-55 to +150					°C	
Storage Temperature Range	TSTG	-55 to +150					°C	

- NOTES : 1. Reverse Recovery Test Conditions :IF=0.5A,IR=1.0A,IRR=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

FIG.1 - FORWARD CURRENT DERATING CURVE

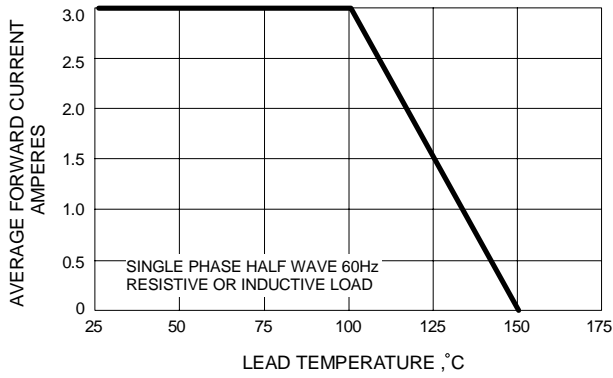


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

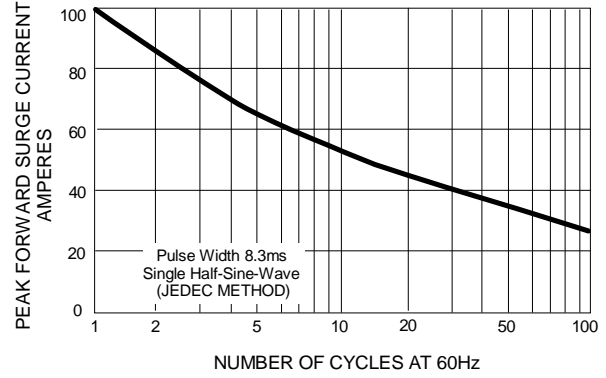


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

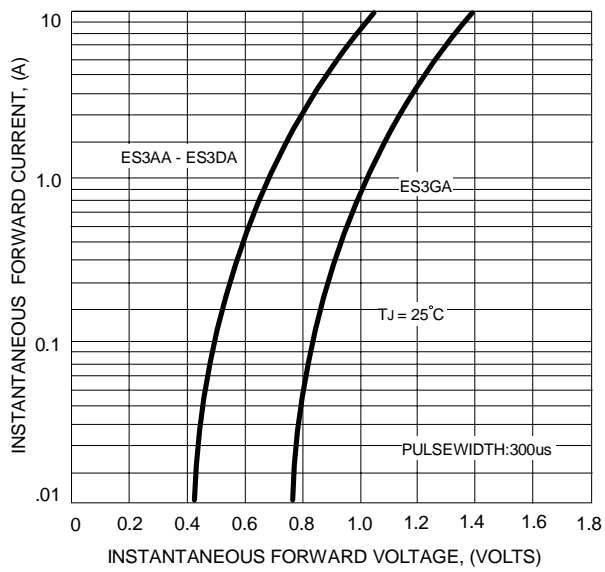


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

