

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

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

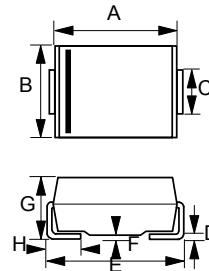
FEATURES

- 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	2.50
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	ES3JB	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	105	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	400	600	V
Maximum Average Forward Rectified Current @TL =110°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	1.30	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					35	ns
Typical Reverse Recovery Time	TRR	20					30	ns
Typical Junction Capacitance (Note 2)	CJ	45						pF
Typical Thermal Resistance	Rθ JA Rθ JL Rθ JC	50 15 15						°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,I_{RR}=0.25A.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

