

**SURFACE MOUNT  
SUPER FAST RECTIFIERS**

REVERSE VOLTAGE - **600 to 1000** Volts  
FORWARD CURRENT - **2.0** Amperes

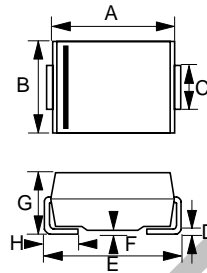
**FEATURES**

- 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	ES2J	ES2K	ES2M	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	600	800	1000	V
Maximum RMS Voltage	VRMS	420	560	700	V
Maximum DC Blocking Voltage	VDC	600	800	1000	V
Maximum Average Forward Rectified Current @TL=110°C	I(AV)	2.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	IFSM	50			A
Maximum forward Voltage at 2.0A DC	VF	1.3	1.5	1.7	V
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=125°C	IR	5 350			uA uA
Maximum Reverse Recovery Time (Note 1)	TRR	35	50		ns
Typical Junction Capacitance (Note 2)	CJ	25			pF
Typical Thermal Resistance (Note 3)	RθJL	25			°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.

REV. 1-PRE, 01-Dec-2000, KSGB03

