

**SURFACE MOUNT
SUPER FAST RECTIFIERS**

REVERSE VOLTAGE - **600 to 1000** Volts
FORWARD CURRENT - **1.0** Ampere

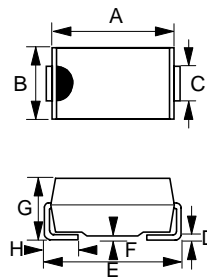
FEATURES

- 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 : Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams

SMA



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	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	ES1J	ES1K	ES1M	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)	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	IFSM	30			A
Maximum forward Voltage at 1.0A DC	VF	1.3	1.5	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=125°C	IR	5 200			uA
Maximum Reverse Recovery Time (Note 1)	TRR	35	50		ns
Typical Junction Capacitance (Note 2)	CJ	10			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, KSGA03

