

**SURFACE MOUNT  
SUPER FAST RECOVERY RECTIFIERS**

REVERSE VOLTAGE - 50 to 600 Volts  
FORWARD CURRENT - 1.0 Amperes

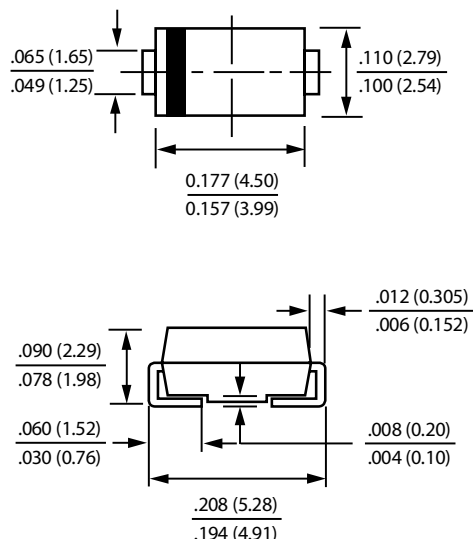
**FEATURES**

- Glass Passivation Junction
- For surface mounted applications
- Low reverse leakage current
- High surge current capability
- High current capability
- Component in accordance of RoHS 2002/95/EC

**MECHANICAL DATA**

- Case : SMA
- Polarity : Color band denotes cathode
- Weight : 0.064 grams
- Mounting position : Any

**SMA**



**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%

PARAMETER	SYMBOL	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	600	V
Maximum RMS voltage	VRMS	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	600	V
Maximum average forward rectified current	IF	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	30.0							A
Maximum instantaneous I <sub>F</sub> =1A@25	V <sub>F</sub>	0.98			1.30		1.75		V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	I <sub>R</sub>	5 100							uA
Typical Junction Capacitance(Note1)	C <sub>J</sub>	50			30				pF
Maximum Reverse Recovery Time(Note2)	T <sub>rr</sub>	35							nS
Operating Temperature Range	T <sub>J</sub>	-55 to +150							
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							

Note1: Measured 1.0MHZ and applied reverse voltage of 4.0 VDC

Note2: Measured with IF=0.5A, IR=1A, IRR=0.25A

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

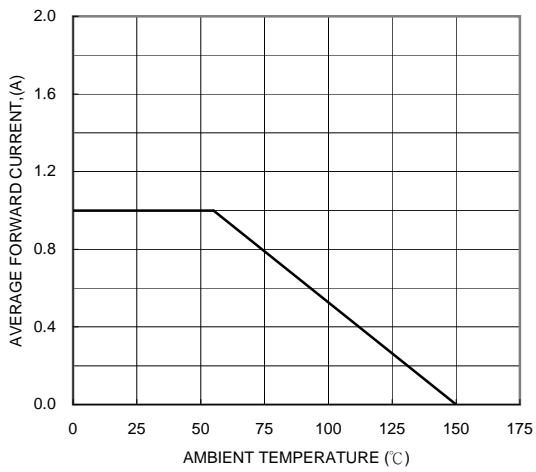


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

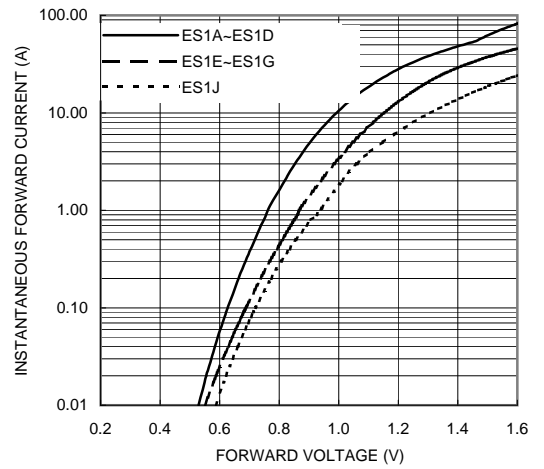


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

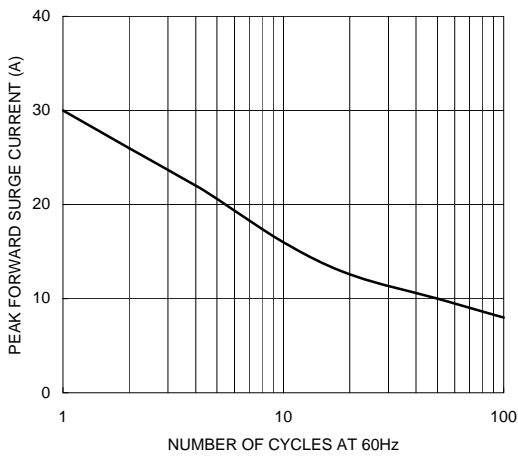


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

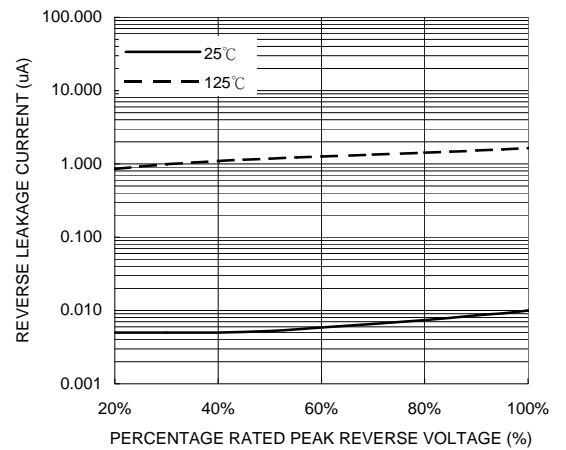


FIG. 5-TYPICAL JUNCTION CAPACITANCE

