

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**
**REVERSE VOLTAGE – 100 to 200 Volts  
FORWARD CURRENT –1.0 Ampere**
**FEATURES**

- Low power loss, high efficiency.
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- Guarding for over voltage protection.
- High temperature soldering guaranteed; 260°C/10 seconds at terminals.

**MECHANICAL DATA**

- Case: SOD-123FL molded plastic over sky die.
- Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl) “Halogen-free”
- Polarity: Color band denotes cathode end.
- Mounting Position: Any.
- Weight : 15.5 mg (Approximate)

**SOD-123FL**

**MAXIMUM RATINGS @ T<sub>A</sub> = 25°C unless otherwise specified**

PARAMETER	SYMBOL	FB1100L	FB1150L	FB1200L	UNIT
Device marking code	Note	110	115	120	--
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	150	200	V
Maximum DC blocking voltage	V <sub>DC</sub>	100	150	200	V
Maximum average forward rectified current @ T <sub>C</sub> = 75°C	I <sub>F(AV)</sub>	1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30			A
Operating junction temperature range	T <sub>J</sub>	-55 to +150			°C
Storage temperature range	T <sub>STG</sub>	-65 to +175			°C

**STATIC ELECTRICAL CHARACTERISTICS @ T<sub>A</sub> = 25°C unless otherwise specified**

PARAMETER	TEST CONDITION	SYMBOL	FB1100L	FB1150L	FB1200L	UNIT
Forward voltage	I <sub>F</sub> = 0.1A I <sub>F</sub> = 0.7A I <sub>F</sub> = 1.0A T <sub>J</sub> = 25°C	V <sub>F</sub>	0.85	0.90	0.92	V
Leakage current	V <sub>R</sub> at rated T <sub>A</sub> = 25°C T <sub>J</sub> = 125°C	I <sub>R</sub>	0.5 10			mA
Typical junction capacitance at 4.0V, 1MHz		C <sub>J</sub>	160			pF

**THERMAL CHARACTERISTICS @ T<sub>A</sub> = 25°C unless otherwise specified**

PARAMETER	SYMBOL	TYP.	UNIT
Thermal resistance (Note 1)	R <sub>thJA</sub> R <sub>thJL</sub>	110 40	°C/W

**Note :**

(1) 8.0mm<sup>2</sup> (0.013mm thick) land areas

REV. 0, Apr.-2016, KSHR05

# RATING AND CHARACTERISTIC CURVES FB1100L thru FB1200L



FIG. 1 – FORWARD CURRENT DERATING CURVE

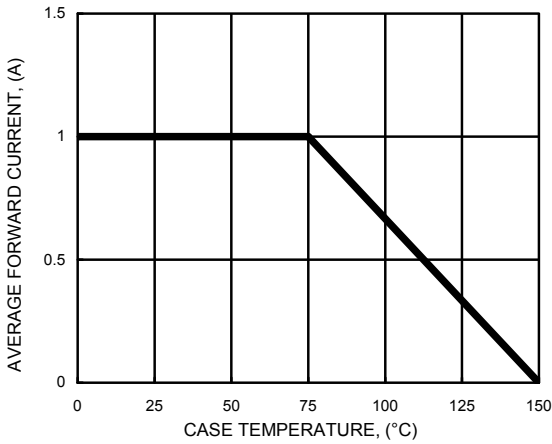


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

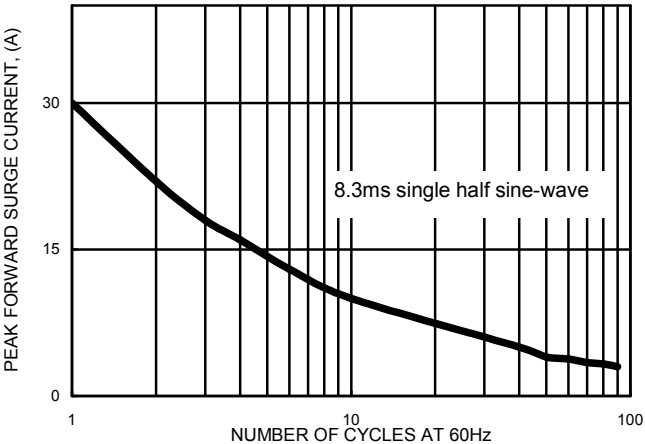


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

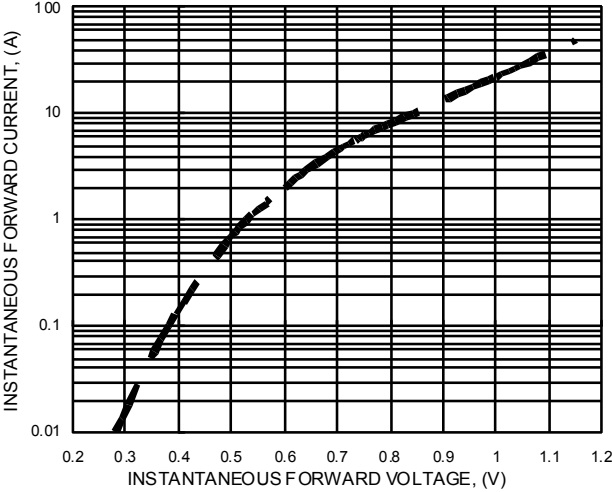


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

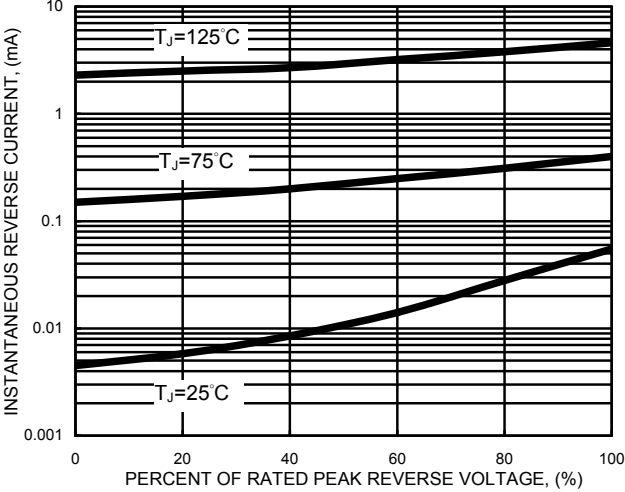


FIG. 5 – TYPICAL REVERSE CHARACTERISTICS

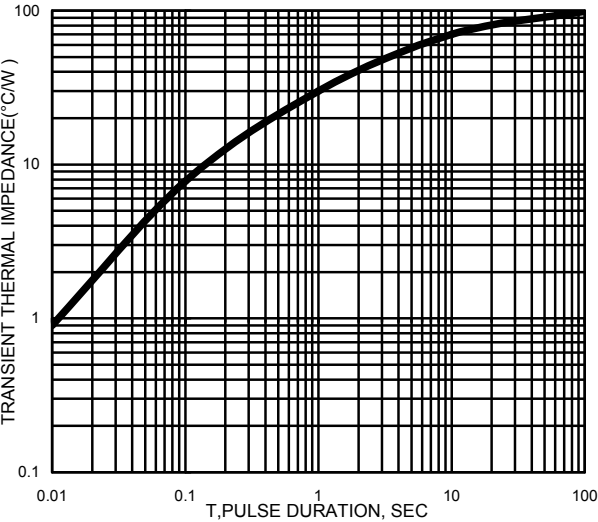
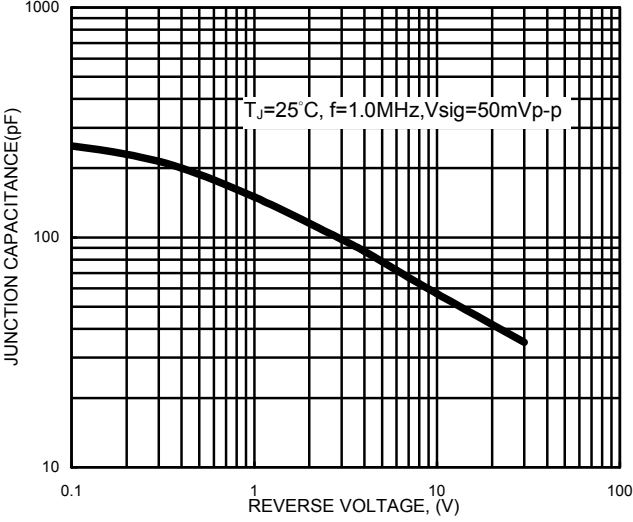


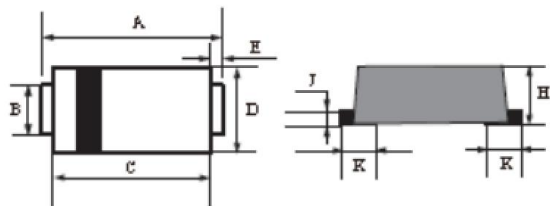
FIG. 6 – TYPICAL TRANSIENT THERMAL IMPEDANCE



**MECHANICAL INFORMATION**  
**FB1100L thru FB1200L**

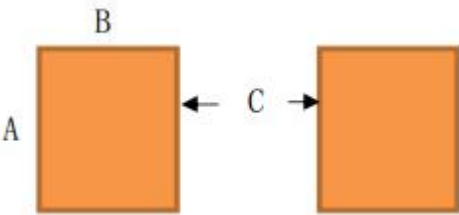
**Package Dimensions :**

**SOD-123FL**



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.5	3.9	0.138	0.159
B	0.75	0.95	0.029	0.037
C	2.6	3.0	0.103	0.119
D	1.6	2.0	0.063	0.079
E	0.45Typ		0.018Typ	
H	0.9	1.2	0.036	0.047
J	0.12	0.22	0.005	0.009
K	0.8Typ		0.032Typ	

**Soldering Pad Layout :**



**Dimensions in inches and ( millimeters)**

PACKAGE	A	B	C
SOD-123FL	0.044(1.10)	0.040(1.00)	0.079(2.00)

## **Important Notice and Disclaimer**

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