

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 40 to 60 Volts  
FORWARD CURRENT - 1.0 Ampere

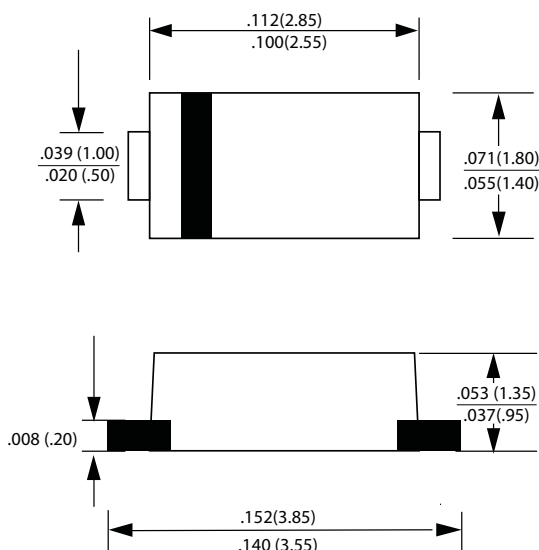
**FEATURES**

- Low profile package
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case : Molded plastic
- Polarity :Color band denotes cathode.

SOD-123FL



**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	CSRB140	CSRB160	UNIT
maximum recurrent peak reverse voltage	VRRM	40	60	V
Maximum RMS voltage	VRMS	28	42	V
Maximum DC blocking voltage	VDC	40	60	V
Maximum average forward rectified current	I <sub>F</sub>	1.0		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	25.0		A
Maximum instantaneous@25	V <sub>F</sub>	0.52	0.65	V
Marking code		C4	C6	
Maximum DC Reverse Current at Rated DC Blocking Voltage @25	I <sub>R</sub>	0.5		mA
Typical Junction Capacitance (note1)	C <sub>J</sub>	70		pF
Typical Thermal Resistance (note2)	R <sub>Ja</sub>	310		/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125		
Storage Temperature Range	T <sub>STG</sub>	-55 to +150		

note1. Measured at 1MHz and applied reverse of 4V DC.

note2. FR-4PCB , 2 oz 0.7mmx1.2mm copper pad.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

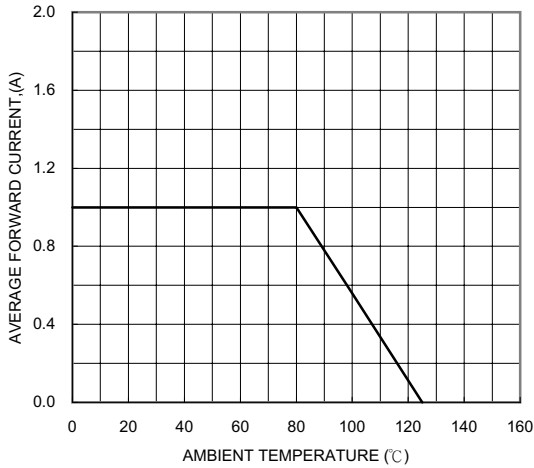


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

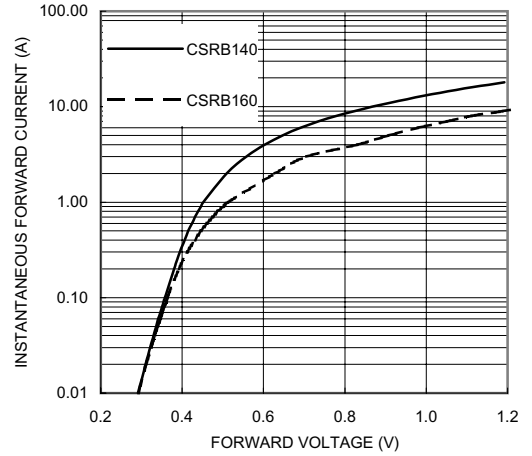


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

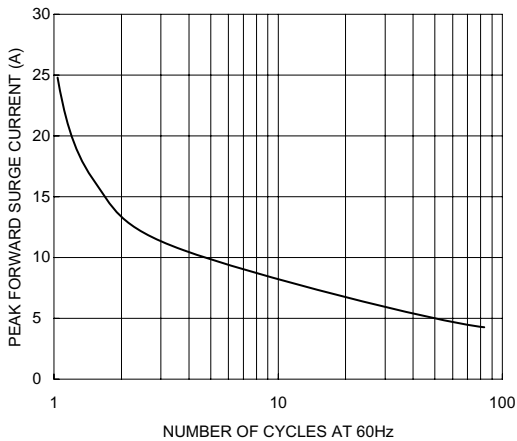


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

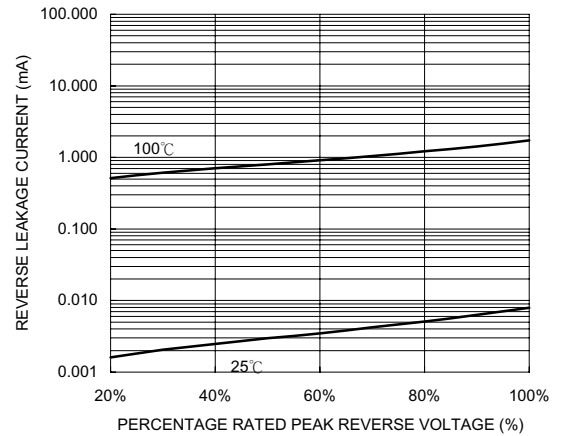


FIG. 5-TYPICAL JUNCTION CAPACITANCE

