

### 2.0A SURFACE MOUNT SCHOTTKY BARRIER DIODE

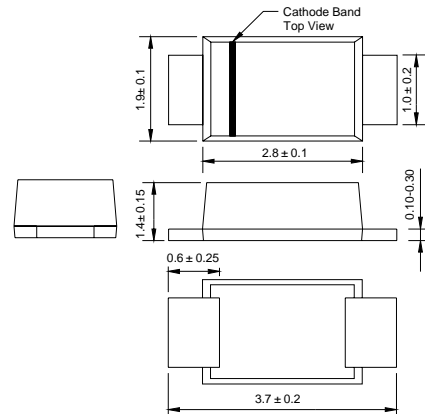
#### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 20A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.01 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

SOD - 123FL



Dimensions in millimeters

#### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	DS22W	DS23W	DS24W	DS25W	DS26W	DS28W	DS210W	DS215W	DS220W	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>											
Working Peak Reverse Voltage	V <sub>VRM</sub>	20	30	40	50	60	80	100	150	200	V	
DC Blocking Voltage	V <sub>R</sub>											
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	35	42	56	70	105	140	V	
Average Rectified Output Current @T <sub>L</sub> = 75°C	I <sub>O</sub>	2.0									A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40									A	
Forward Voltage @I <sub>F</sub> = 2.0A	V <sub>FM</sub>	0.55			0.70		0.85		0.95		V	
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	0.5					0.3				mA	
At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C		10					5					
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>	28					110					°C/W
Typical Junction Capacitance	C <sub>j</sub>	220				80						pF
Operating Temperature Range	T <sub>j</sub>	-65 to +125									°C	
Storage Temperature Range	T <sub>STG</sub>	-65 to +150									°C	

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad area.

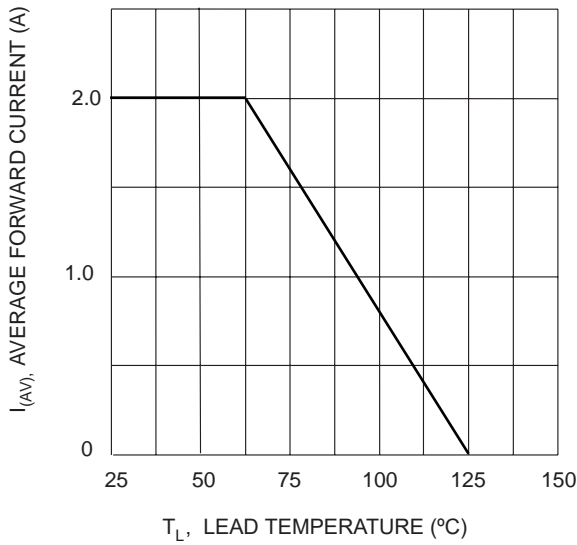


Fig. 1 Forward Current Derating Curve

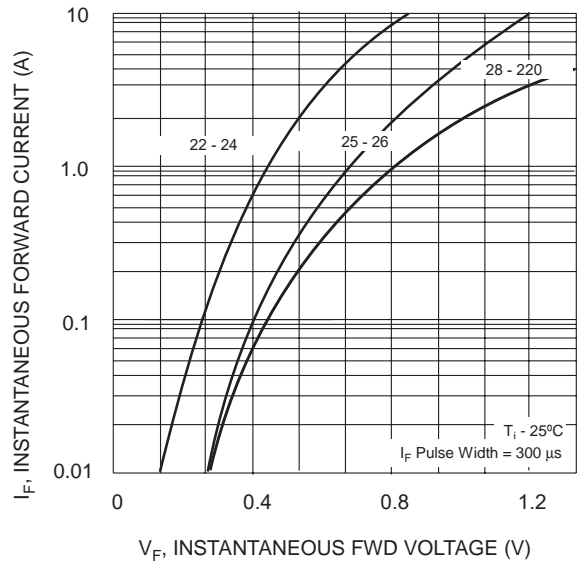


Fig. 2 Typ. Forward Characteristics

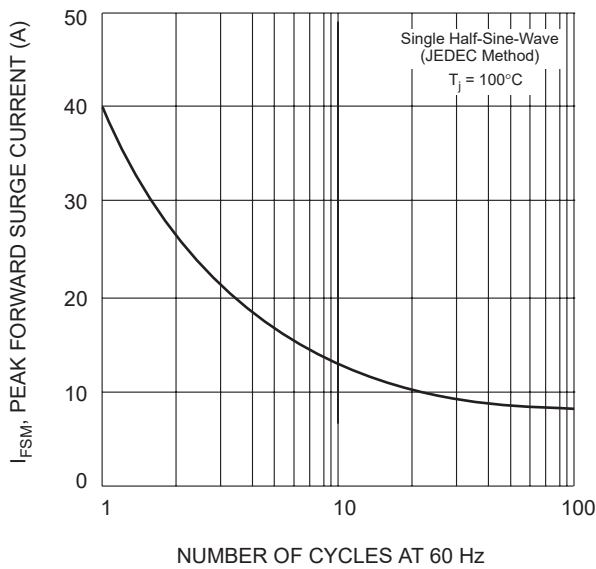


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

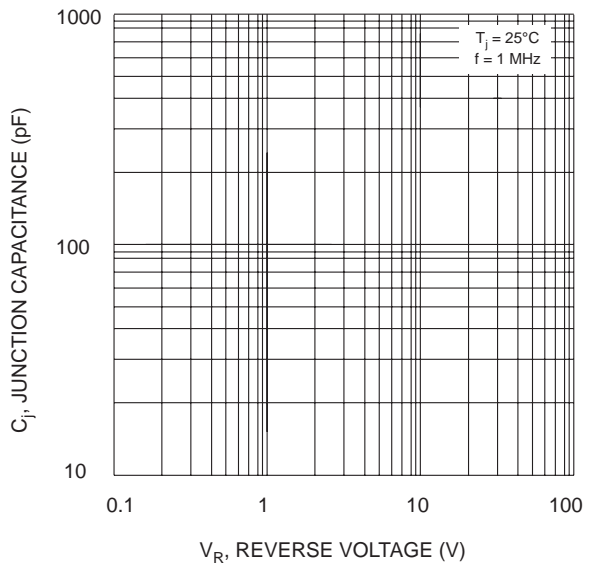


Fig. 4 Typical Junction Capacitance

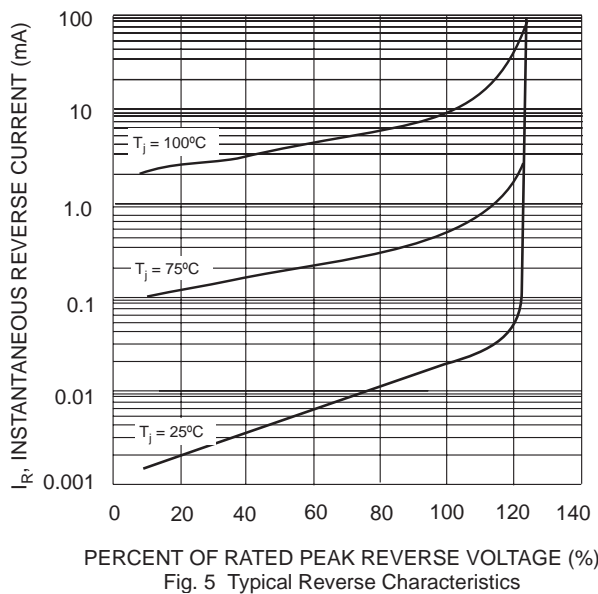


Fig. 5 Typical Reverse Characteristics