

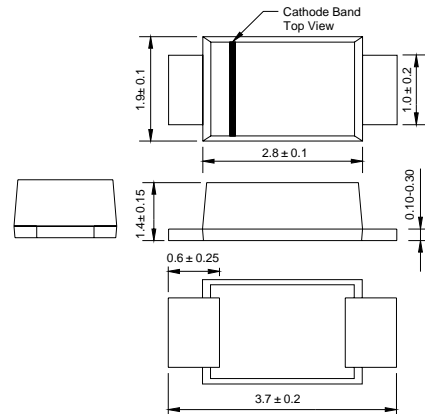
Features

- 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 @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	DSK12	DSK13	DSK14	DSK15	DSK16	DSK18	DSK110	DSK115	DSK120	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Working Peak Reverse Voltage	V_{RWM}											
DC Blocking Voltage	V_R											
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	V	
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	I_O	1.0									A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25									A	
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	0.55			0.70		0.85		0.95		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	0.3 10					0.2 5		0.1 2		mA	
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	28 110										$^\circ\text{C/W}$
Typical Junction Capacitance	C_j	110				80						pF
Operating Temperature Range	T_j	-65 to +125									$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-65 to +150									$^\circ\text{C}$	

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.

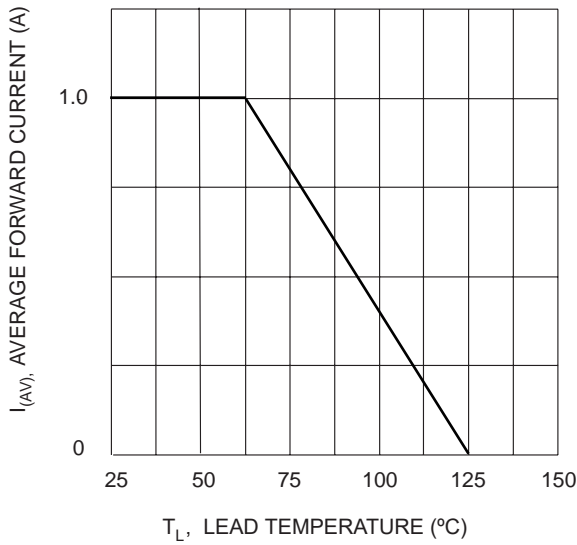


Fig. 1 Forward Current Derating Curve

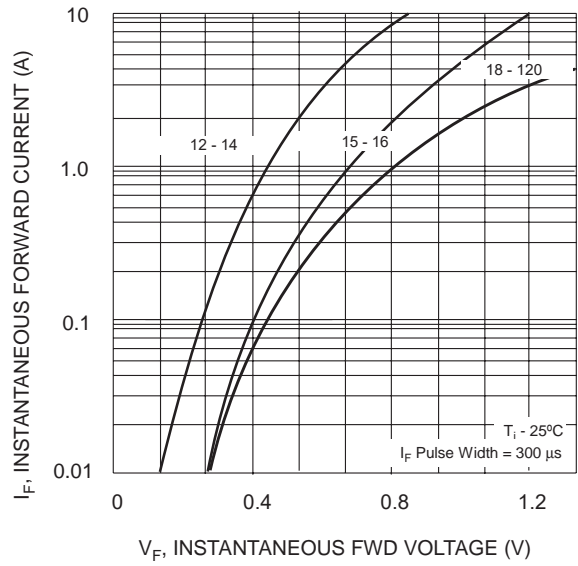


Fig. 2 Typ. Forward Characteristics

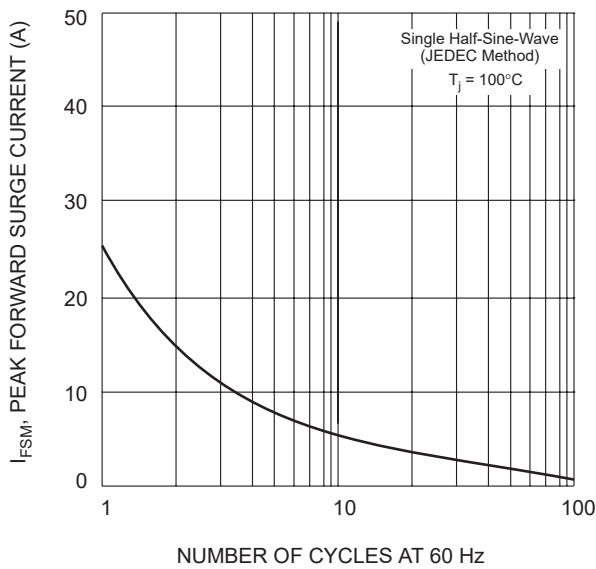


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

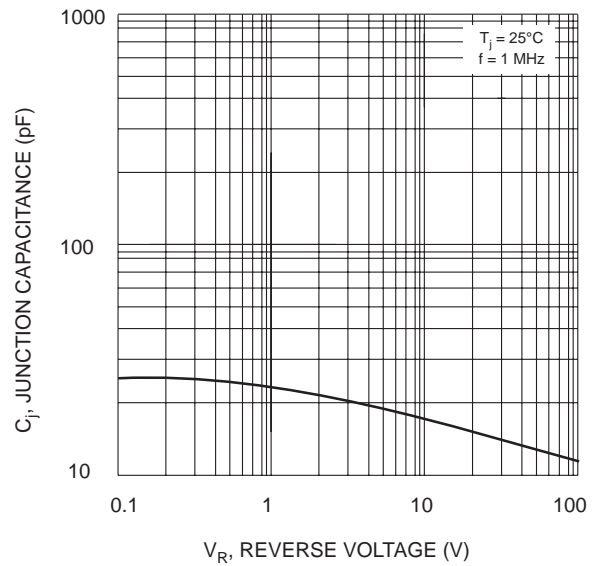


Fig. 4 Typical Junction Capacitance

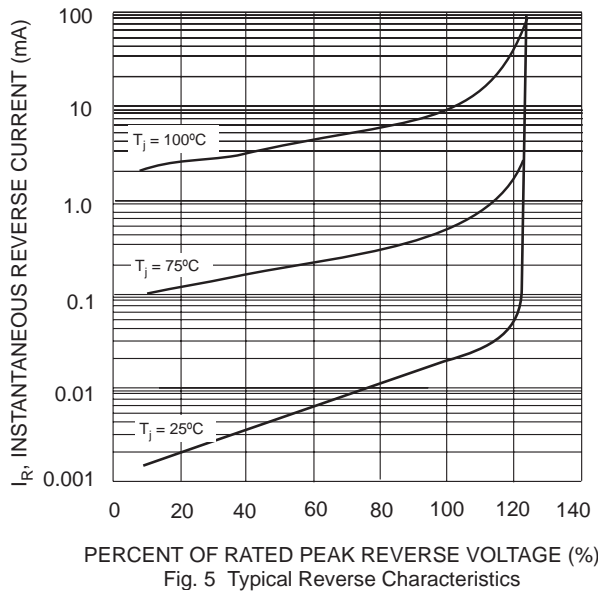


Fig. 5 Typical Reverse Characteristics