

**SOD-123FL**

### Features

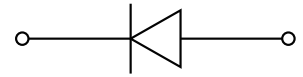
- High Current Capability
- Low Forward Voltage Drop
- Low IR
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

### Applications

The device is a single rectifier offering low VF and excellent high temperature stability.

### Mechanical Data

- Case: SOD-123FL  
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end



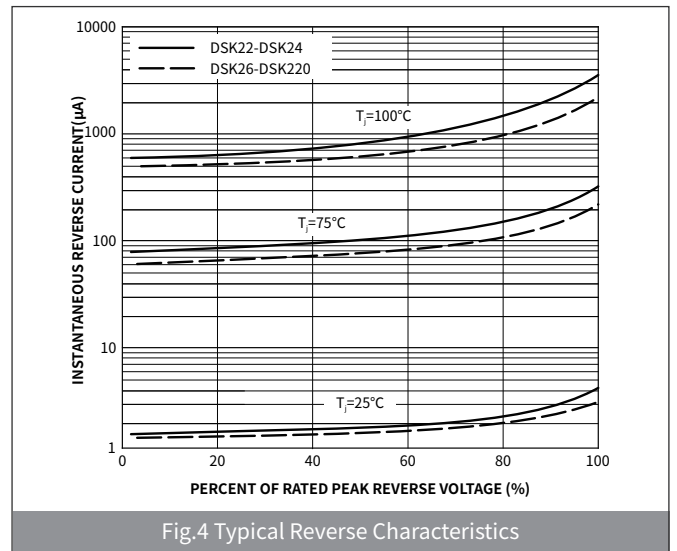
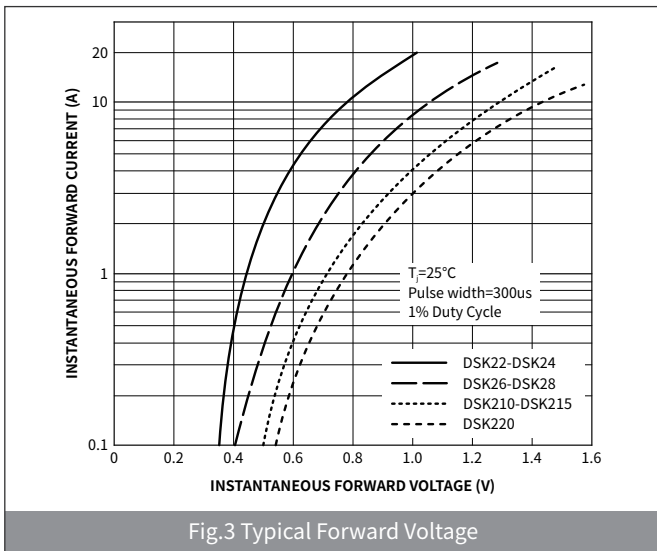
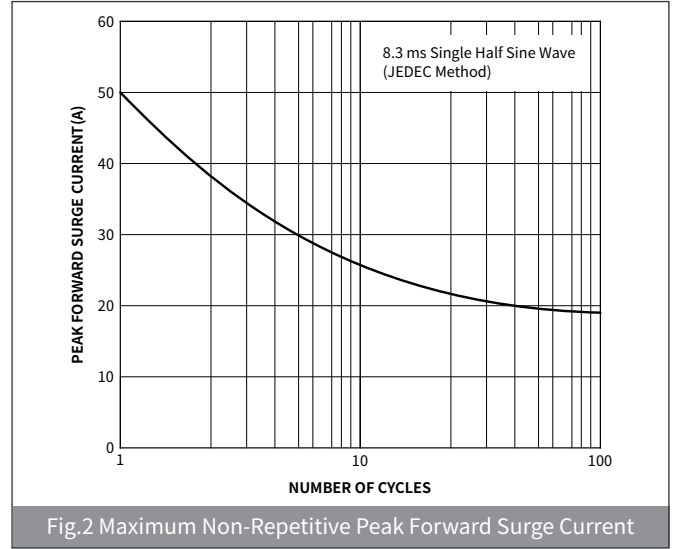
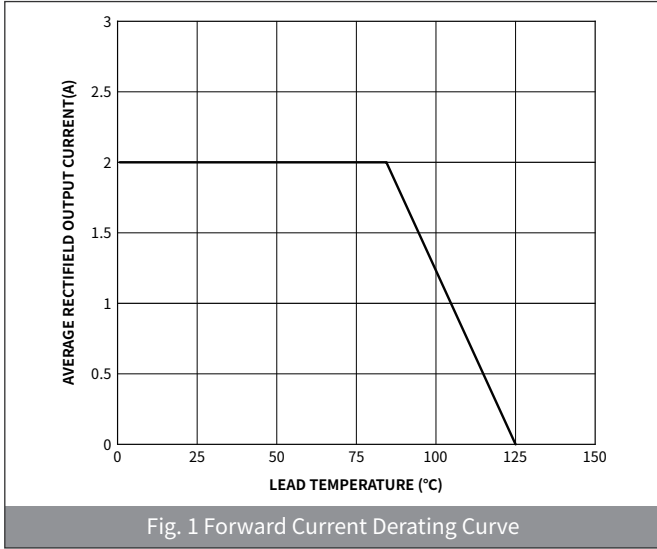
### Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DSK22	DSK24	DSK25	DSK26	DSK28	DSK210	DSK215	DSK220
Maximum repetitive peak reverse voltage	$V_{RRM}$	V	20	40	50	60	80	100	150	200
Maximum RMS Voltage	$V_{RMS}$	V	14	28	35	42	56	70	105	140
Maximum DC blocking Voltage	$V_{DC}$	V	20	40	50	60	80	100	150	200
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	2.0							
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	$I_{FSM}$	A	50.0							
Storage temperature	$T_{stg}$	°C	-50 ~+150							
Junction temperature	$T_j$	°C	-50 ~+125				-50 ~+150			
Typical Thermal Resistance	$R_{\theta J-A}$	°C/W	85							

### Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	DSK22	DSK24	DSK25	DSK26	DSK28	DSK210	DSK215	DSK220
Maximum instantaneous forward voltage	$I_F=2.0A$	$V_F$	V	0.55		0.70		0.85		0.95	
Maximum reverse current	$V_R=V_{RRM} T_A=25^\circ C$	$I_R$	mA	0.2				0.05			
	$V_R=V_{RRM} T_A=100^\circ C$			20				5			
Typical junction capacitance	4.0V DC, 1MHz	$C_j$	pF	220				80			

► **Ratings And Characteristics Curves** ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)



### ▶ Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-123FL	R1	0.0169	3000	30000	120000	7"

### ▶ Package Outline Dimensions (SOD-123FL)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.90	1.10	0.035	0.430
B	2.55	2.85	0.100	0.111
C	1.60	1.90	0.063	0.074
D	3.60	3.90	0.031	0.043
E	1.00	1.20	0.031	0.035
F	0.40	0.90	0.047	0.055
G	0.10	0.25	0.003	0.007

### ▶ Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	1.00	-	0.040	-
K	-	1.90	-	0.074
M	1.50	-	0.059	-