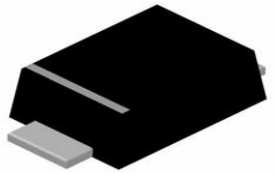
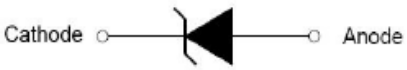
SOD-123FL





Features

Low reverse leakage
Glass passivated junction
High forward surge current capability
High efficiency operation

Mechanical Data

SOD-123FL Small Outline Plastic Package
Polarity: Color band denotes cathode end
Epoxy UL: 94V-0
Mounting Position: Any

Maximum Ratings & Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.)

Parameter	SYMBOLS	F7	UNITS
	MARKING	F7	
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current at T_L =100 C	$I_{(AV)}$	1.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0	A
Maximum instantaneous forward voltage at 1.0A	V_F	1.30	V
Maximum DC reverse current T_A =25 C at rated DC blocking voltage T_A=125 C	I_R	10 500	u A
Maxinum reverse recovery time(Note 1)	Trr	500	ns
Typical junction capacitance (Note2)	C_J	10.0	pF
Typical thermal resistance	R_{qJA}	65.0	C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150	C

Note: 1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123FL	Tape/Reel,7" reel	3000	EIA-481-1

Ratings and Characteristic Curves

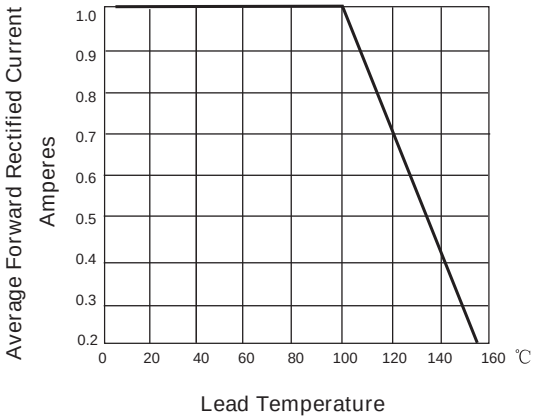


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

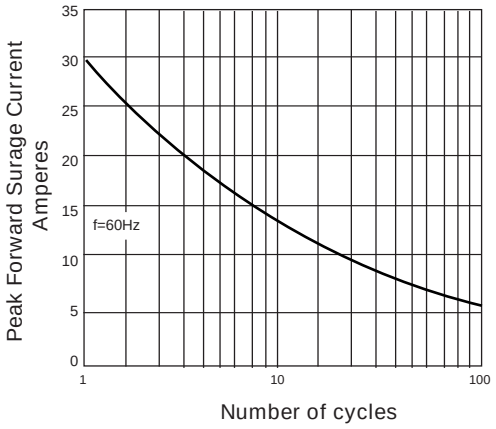


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

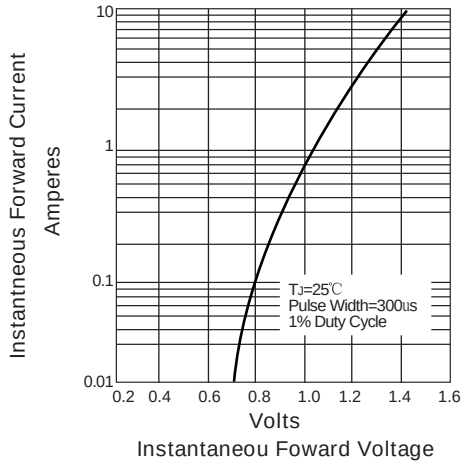


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

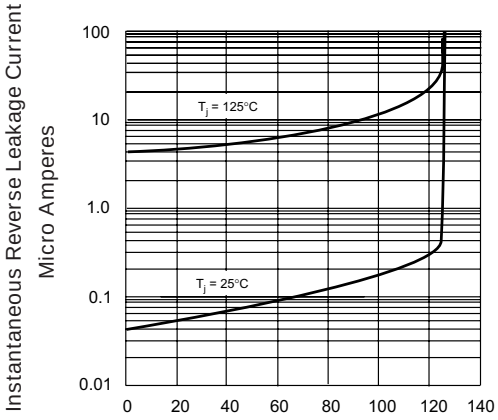
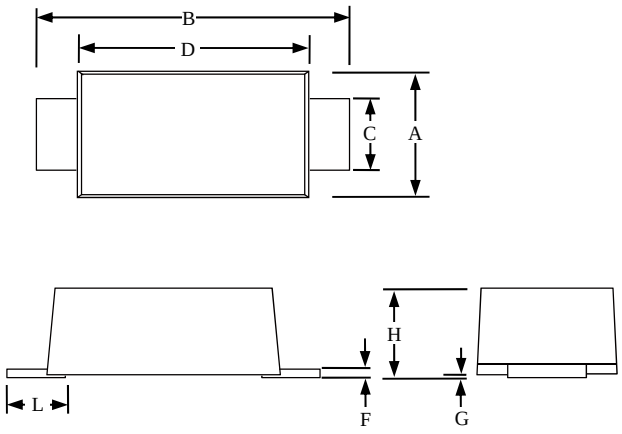


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Package Outline Dimensions: SOD-123FL



SOD-123FL						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.059		0.079	1.5		2
B	0.134		0.154	3.4		3.9
C	0.028		0.047	0.7		1.2
D	0.098		0.114	2.5		2.9
F	0.002		0.01	0.05		0.26
G	-		0.004	-		0.1
H	0.037		0.053	0.95		1.35
L	0.014		0.035	0.35		0.9