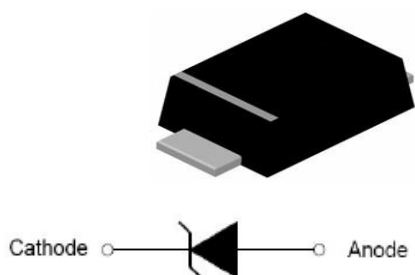


SOD-123FL



Marking: SL

Features

High Current Capability
Low Forward Voltage Drop
Halogen free and RoHS compliant

Mechanical Data

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

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	B5819	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IFM	1.0	A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	25.0	A
Typical thermal resistance	RθJA	80	°C/W
Operating junction temperature range	Tj	-50-+125	°C
Storage temperature range	TSTG	-50-+150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Test conditions	B5819	Unit
Maximum forward voltage	VF	IF = 1000mA	0.55	V
Maximum reverse breakdown voltage	VR	IR=100uA	40	V
Maximum reverse current	IR	VR=40V	0.5	mA
Type junction capacitance	Cj	VR =0V, f = 1MHz	50	pF
Reverse recovery time	Trr	IF=IR=200mA, Irr=0.1xIR, RL=100 Ω	10	ns

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

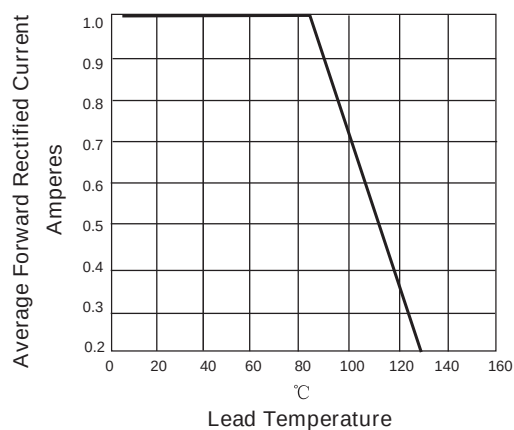


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

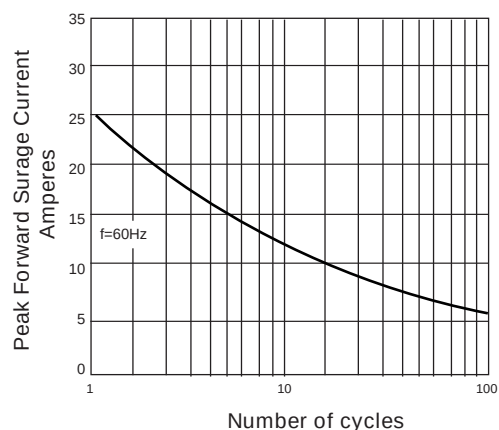


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

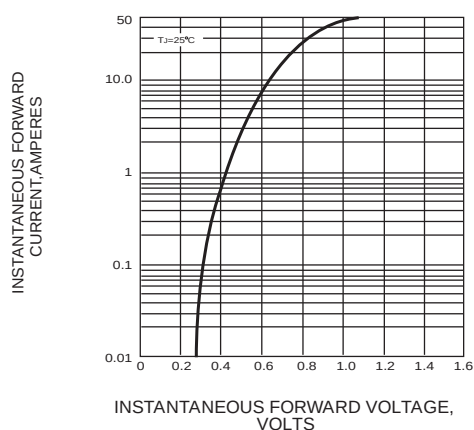


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

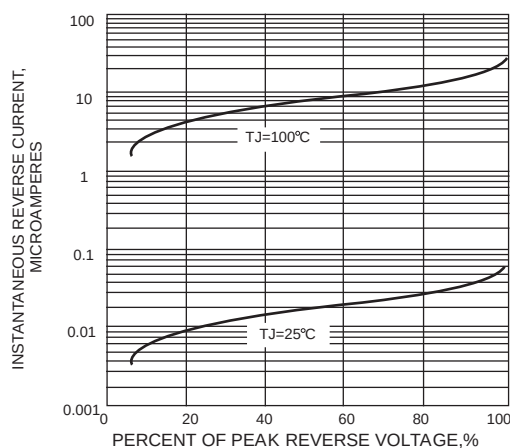
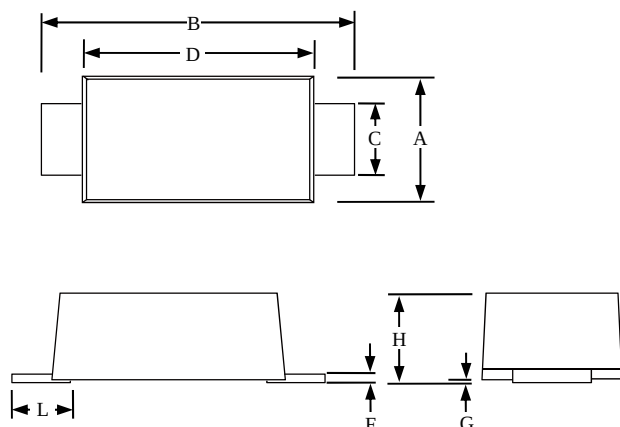


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

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