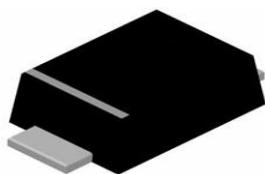




SOD-123FL



Features

Low forward voltage drop
 Guarding protection
 Glass passivated junction
 High current capability
 High efficiency operation
 Extremely low thermal resistance

Mechanical Data

CASE: SOD-123FL Molded Plastic
 Polarity: Color band denotes cathode end
 Mounting position: ANY
 Weight: 0.0007 ounces, 0.021 gram

Maximum Ratings & Electrical Characteristics

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

CHARACTERISTICS	SYMBOL	DSS34	DSS36	DSS310	UNITS
	Marking	K 34	K 36	K310	
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	100	V
Maximum RMS voltage	V_{RWS}	28	42	70	V
Maximum DC blocking voltage	V_{DC}	40	60	100	V
Maximum average forward rectified current at $T_L=90^{\circ}\text{C}$	$I_{F(AV)}$	3.0			A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	50			A
Maximum instantaneous forward voltage at $I_{FM}=3.0\text{A}$ (NOTE1)	V_F	0.55	0.70	0.85	V
Maximum DC reverse current $T_J=25^{\circ}\text{C}$ at rated DC blocking voltage $T_J=125^{\circ}\text{C}$	I_R	0.5 50.0		0.1 10.0	m A
Maximum thermal resistance	$R_{\theta JL}$	60			$^{\circ}\text{C/W}$
Operating temperature range	T_J	-55 ---- +125			$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 ---- +150			$^{\circ}\text{C}$

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

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

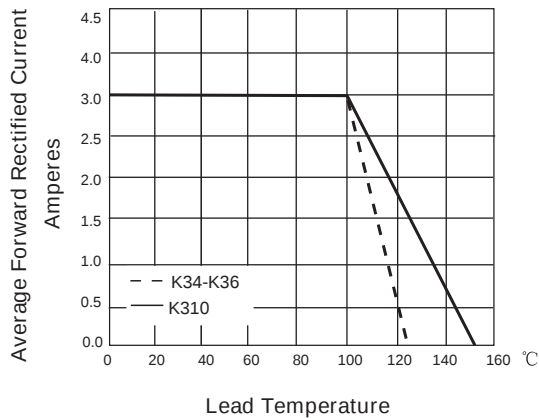


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

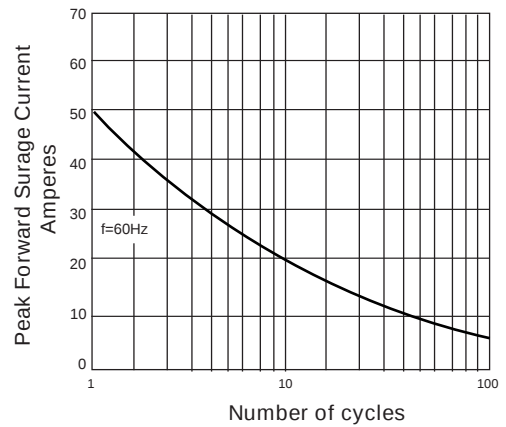


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

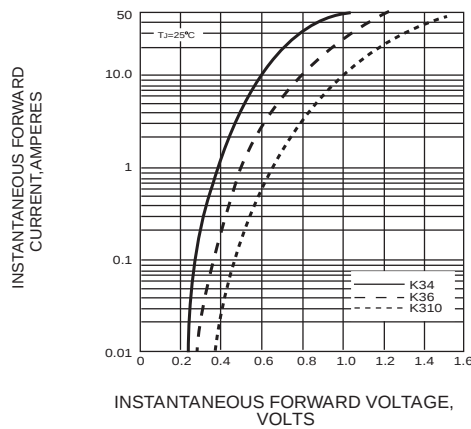


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

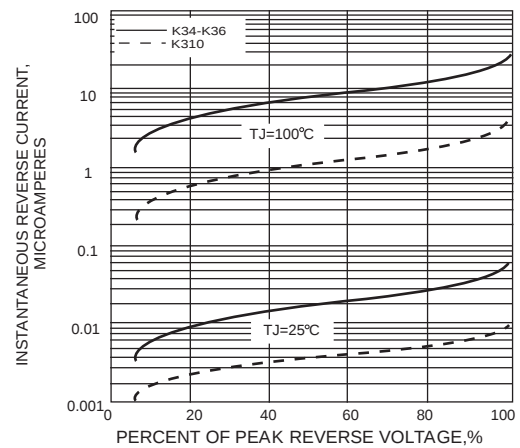
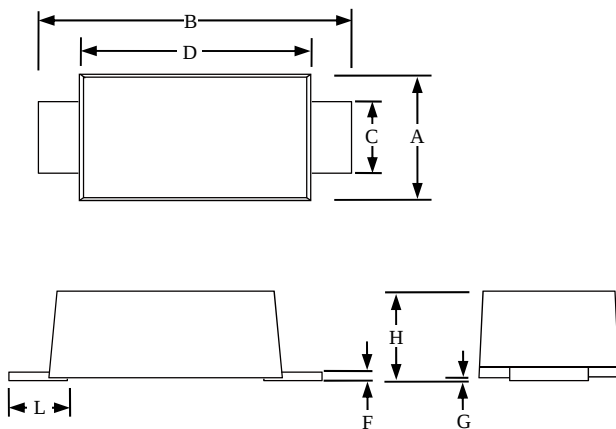


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

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