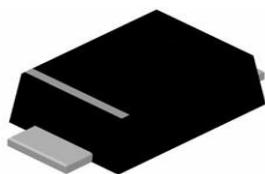




SOD-123FL



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: 0.0025 ounces, 0.071 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	DSS14	DSS16	DSS110	DSS120	UNITS
	Marking	K14	K16	K110	K120	
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	100	200	V
Maximum RMS voltage	V _{RWS}	28	42	70	140	V
Maximum DC blocking voltage	V _{DC}	40	60	100	200	V
Maximum average forward rectified current at T _L =90℃	I _{F(AV)}	1.0				A
Peak forward surge current 8.3ms single half-sine-wave	I _{FSM}	25				A
Maximum instantaneous forward voltage at I _{FM} =1.0A (NOTE1)	V _F	0.55	0.70	0.85	0.95	V
Maximum DC reverse current T _J =25℃ at rated DC blocking voltage T _J =125℃	I _R	0.5 50.0		0.1 10.0		m A
Maximum thermal resistance	R _{θJL}	80				℃/W
Operating temperature range	T _J	-55 ---- +125				℃
Storage temperature range	T _{STG}	-55 ---- +150				℃

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

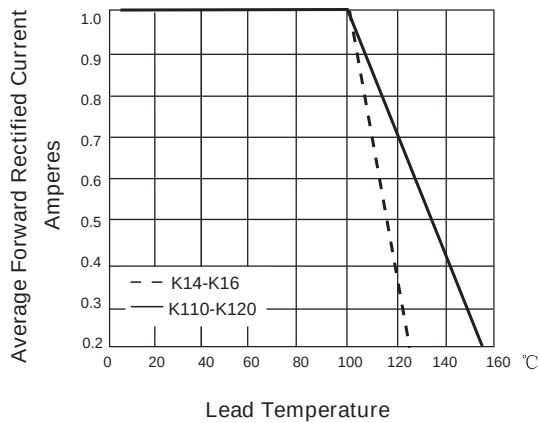


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

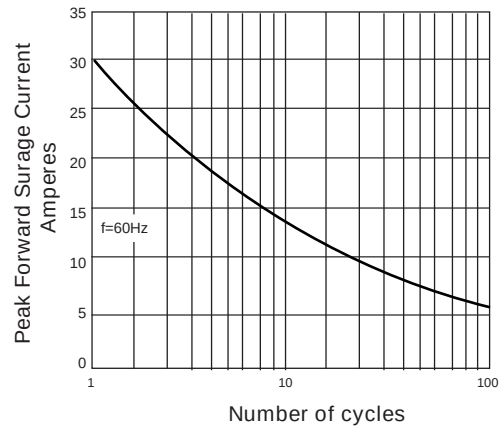


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

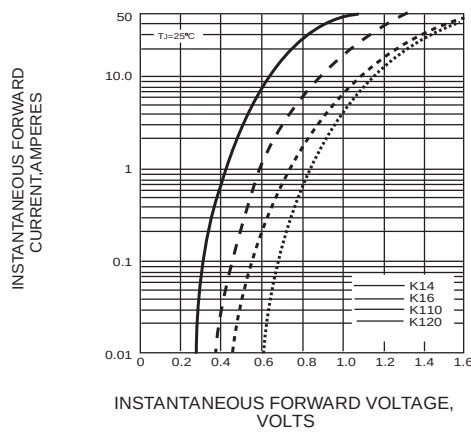


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

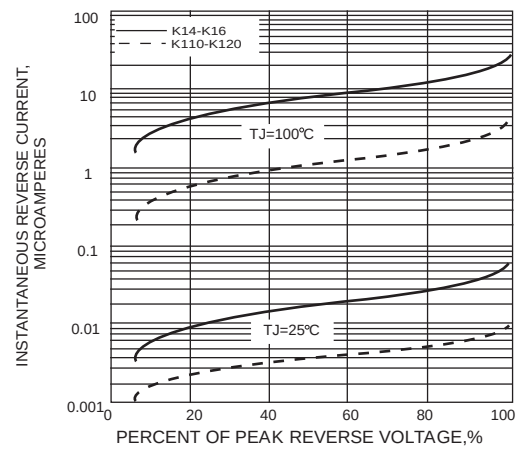
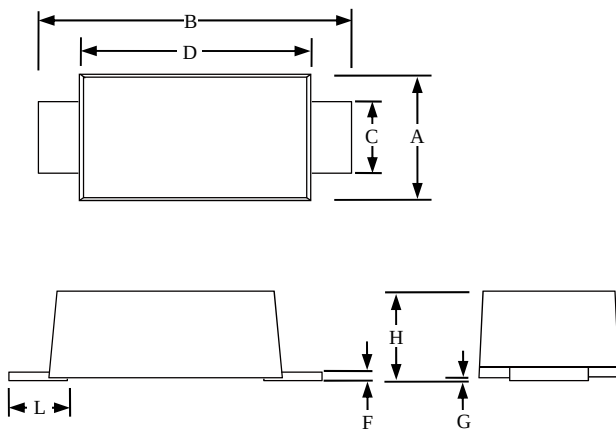


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

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