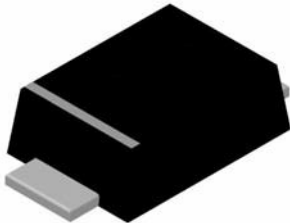


SOD-123FL

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

- SOD 123FL small outline plastic package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V0
- Mounting Position: Any

Maximum Ratings & Thermal Characteristics

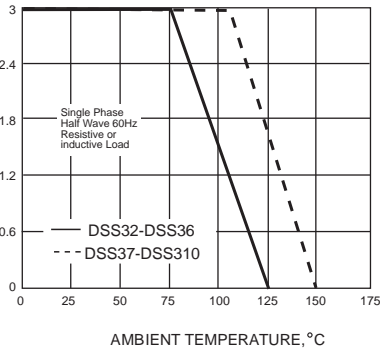
(Ratings at 25°C ambient temperature unless otherwise specified.)

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	DSS32 K32	DSS33 K33	DSS34 K34	DSS35 K35	DSS36 K36	DSS37 K37	DSS38 K38	DSS39 K39	DSS310 K310	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	3.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0									Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.52	0.55	0.70		0.85				Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.5					10.0				mA
		20.0									
Operating junction temperature range	T_J	-50 to +125					-50 to +150				°C
Storage temperature range	T_{STG}	-50 to +150									°C

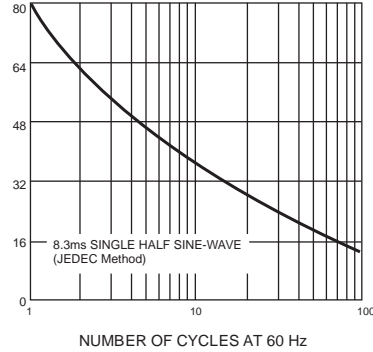
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



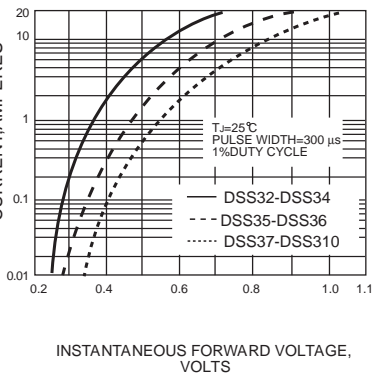
PEAK FORWARD SURGE CURRENT, AMPERES

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



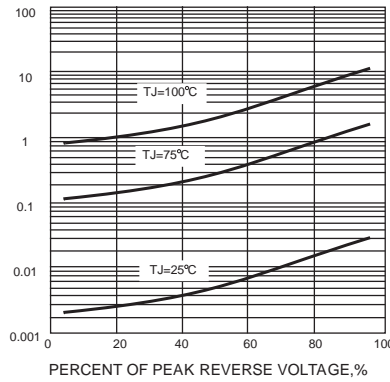
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

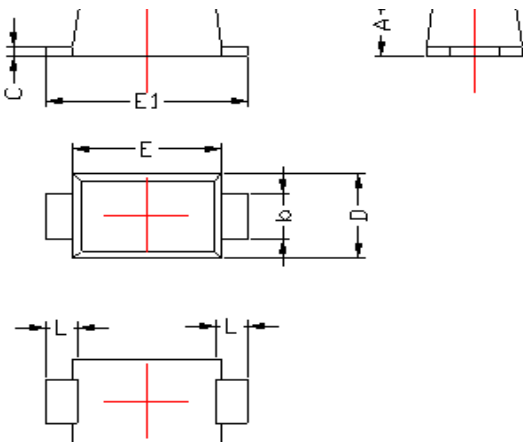


INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



SOD-123FL PACKAGE OUTLINE Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.20	1.40
b	0.80	1.10
c	0.15	0.25
D	1.75	1.95
E	2.70	2.90
E1	3.50	3.90
L	0.35	0.85