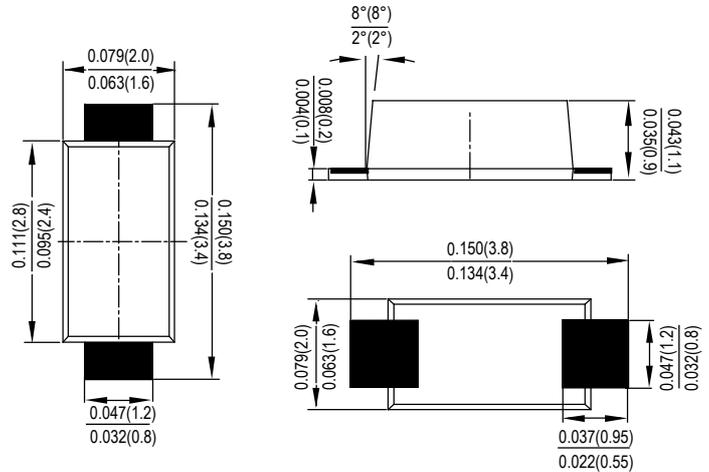


Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

SOD-123FL



Dimensions in inches and (millimeters)

Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	DSS32	DSS33	DSS34	DSS35	DSS36	DSS38	DSS310	DSS315	DSS320	DSS325	UNITS
	Code	D32	D33	D34	D35	D36	D38	D310	D315	D320	D325	
Peak Repetitive Reverse Voltage	V _{RRM}											V
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	80	100	150	200	250	
DC Blocking Voltage	V _{DC}											
RMS Reverse Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	175	V
Average Rectified Output Current @T _L =90°C	F _(AV)	3.0										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80										A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	26.560										A ² s
Forward Voltage per element @I _F =3.0A	V _{FM}	0.55			0.7		0.85		0.92		0.95	V
Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =100°C	I _R	0.1					0.05					mA
		10					5					
Typical Junction Capacitance (Note 1)	C _J	110					70					pF
Typical thermal resistance (NOTE 2)	R _{θJA}	75										°C/W
Operating junction temperature range	T _J	-55to+150										°C
Operating and Storage Temperature Range	T _{STG}	-55to+150										°C

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

FIG. 1- FORWARD CURRENT DERATING CURVE

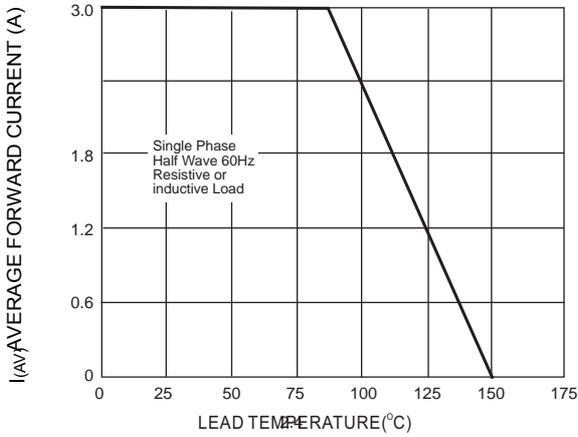


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

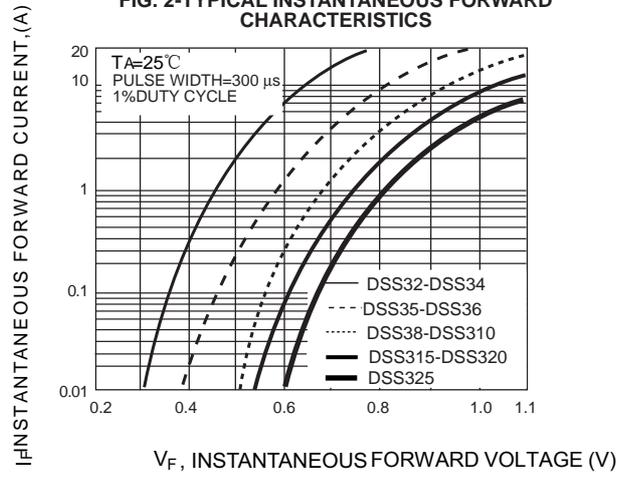


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

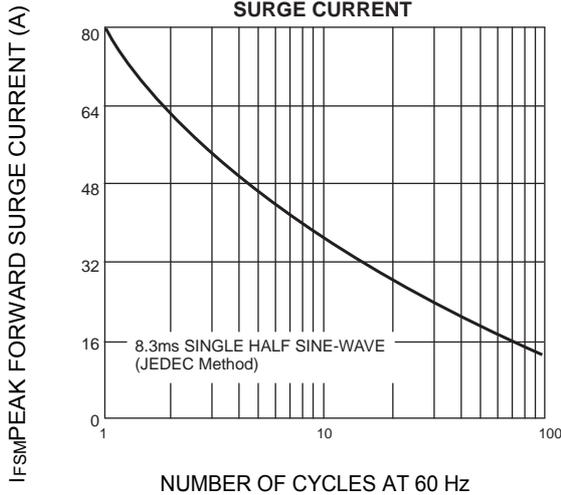


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

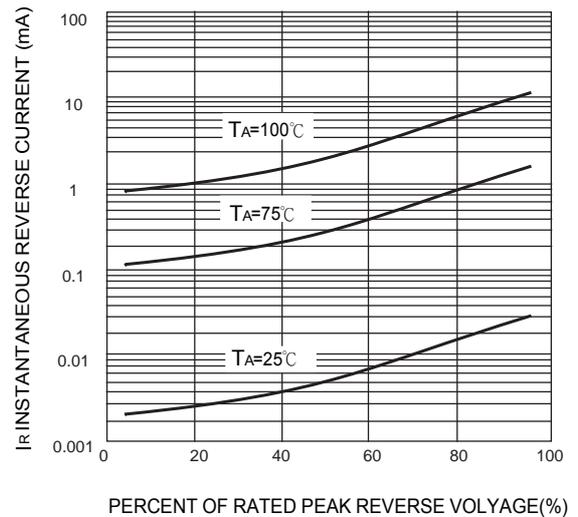
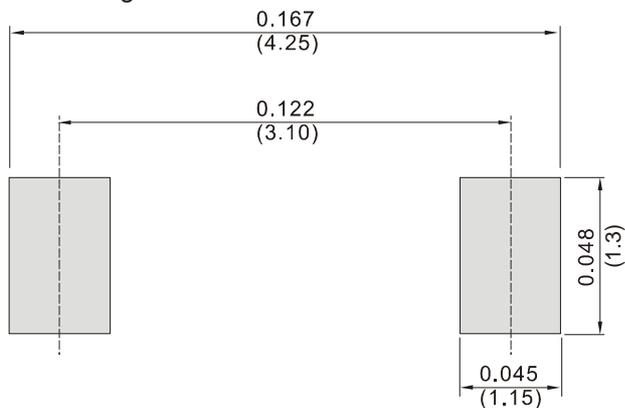


Fig.5 TYPICAL CAPACITANCE



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