

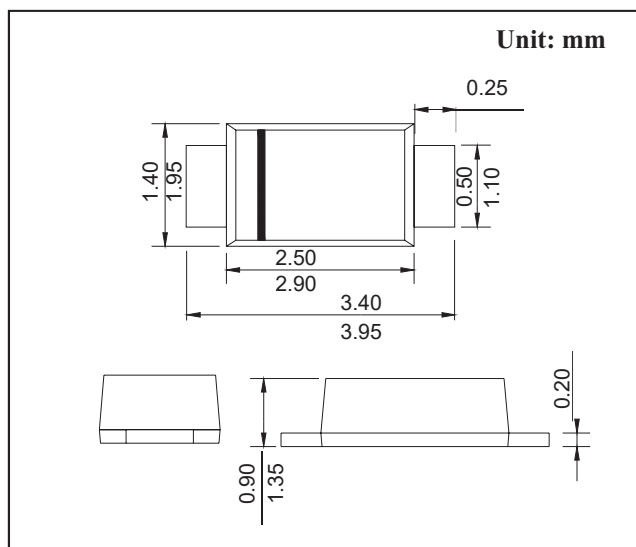
SOD-123FL Ultra-Fast Recovery Rectifier Diodes

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SOD-12FL molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	SYMBOLS	ES1AW	ES1BW	ES1CW	ES1DW	ES1EW	ES1GW	ES1JW	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	VOLTS
Maximum average forward rectified current	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25.0							Amps
Maximum instantaneous forward voltage at1.0A	V _F	0.95				1.25		1.7	Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 100.0							μA
Maximum reverse recovery time (NOTE 1)	trr	35							ns
Typical junction capacitance (NOTE 2)	C _J	10							pF
Typical thermal resistance (NOTE 3)	R _{θJA}	85							K/W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150							°C

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

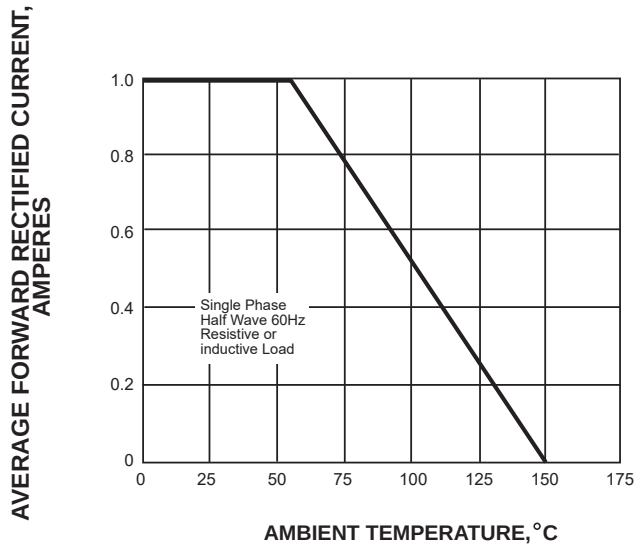


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

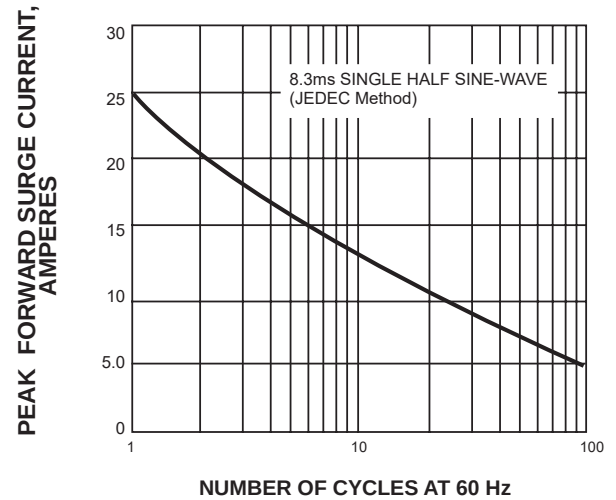


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

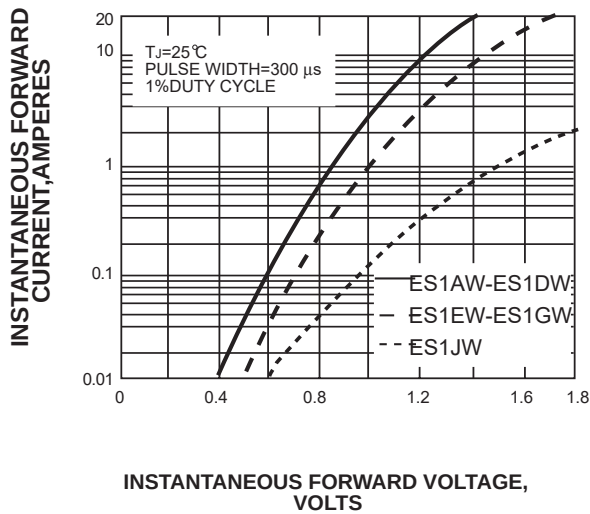


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

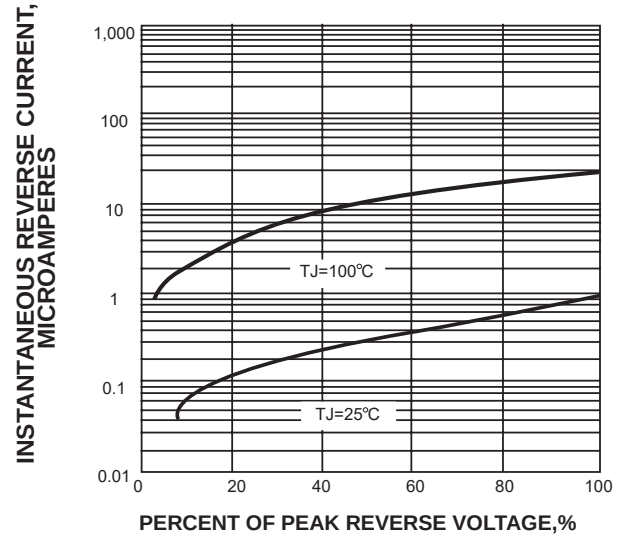


FIG. 5-TYPICAL JUNCTION CAPACITANCE

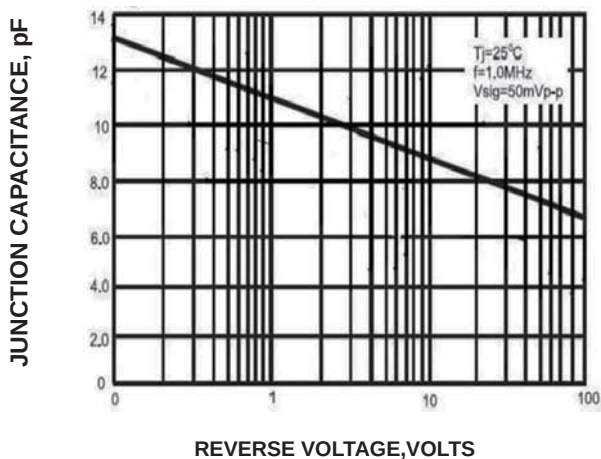


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

