

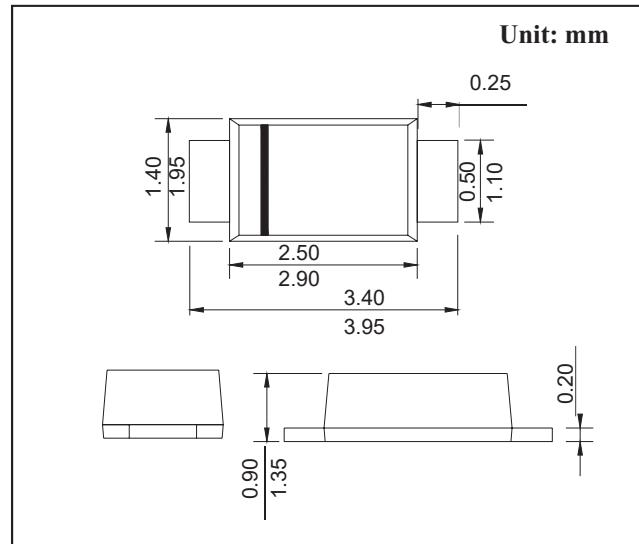
SOD-123FL FAST RECOVERY RECTIFIERS

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-123FL molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	SYMBOLS	F1A	F1B	F1D	F1G	F1J	F1K	F1M	UNITS		
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS		
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS		
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS		
Maximum average forward rectified current at $T_A = 65^\circ\text{C}$	$I_{(AV)}$	1.0						Amp			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L=25^\circ\text{C}$	I_{FSM}	30.0						Amps			
Maximum instantaneous forward voltage at 1.0A	V_F	1.3						Volts			
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5.0 50.0						μA			
Maximum reverse recovery time	trr	150		250	500		ns				
Typical junction capacitance	C_J	4						pF			
Typical thermal resistance	$R_{\theta JA}$	180						K/W			
Operating junction and storage temperature range	$T_J T_{STG}$	-55 to +150						°C			

RATINGS AND CHARACTERISTIC CURVES

FIG.1 --TYPICAL FORWARD CHARACTERISTIC

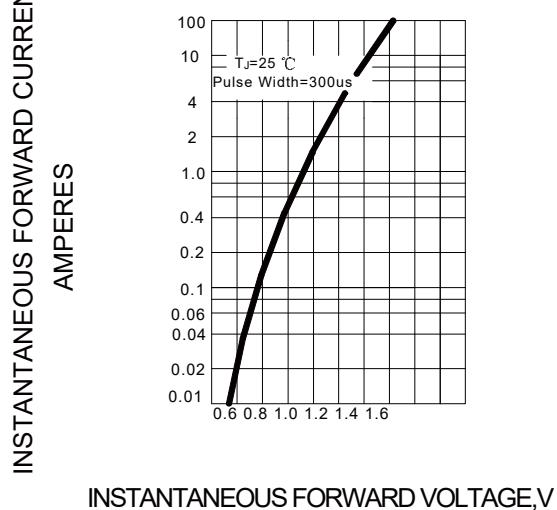


FIG.2 -- TYPICAL JUNCTION CAPACITANCE

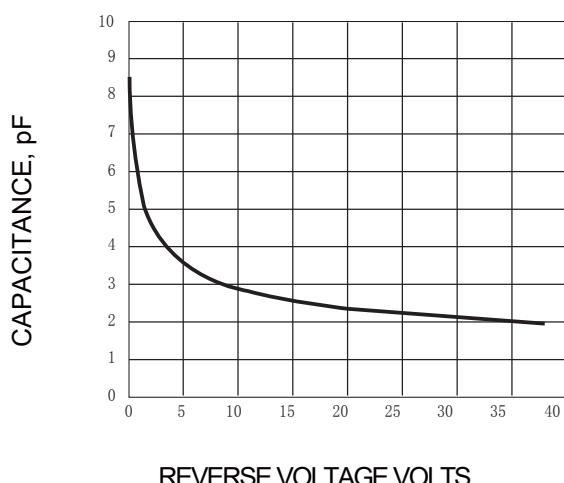


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

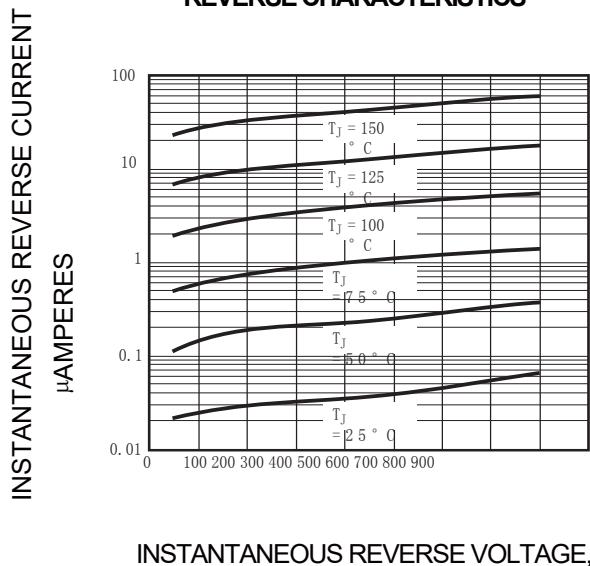


FIG.4 – FORWARD DERATING CURVE

