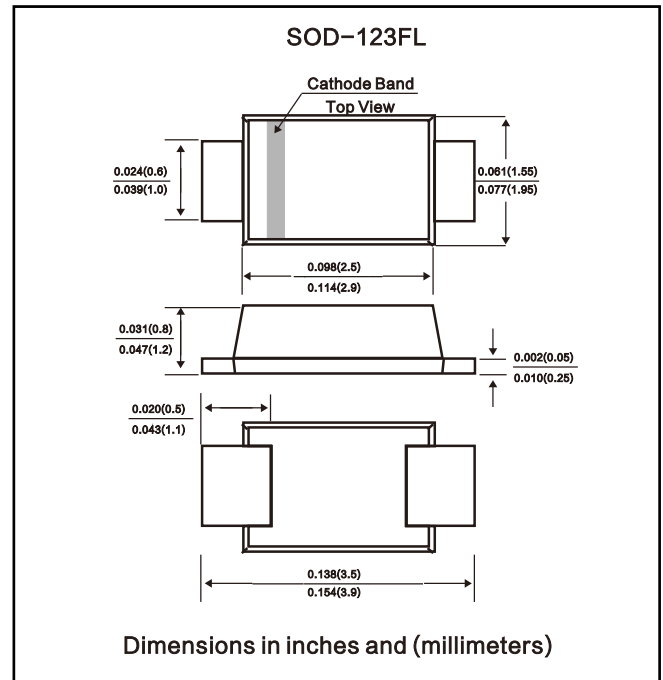


FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- 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

Case: JEDEC SOD-123 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.3 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	A1	A2	A3	A4	A5	A6	A7	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	VDC	50	100	200	400	600	800	1000	Volts
*Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	(AV)	1.0							Amp
*Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_A=75^\circ\text{C}$	I_{FSM}	30.0							Amps
*Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
*Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30.0							μA
*Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical reverse recovery time (NOTE 1)	t_{rr}	30.0							μs
Typical junction capacitance (NOTE 2)	C_J	15.0							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	50.0 25.0							$^\circ\text{C/W}$
Maximum DC blocking voltage temperature	T_A	+150							$^\circ\text{C}$
*Operating junction and storage temperature range	T_J, T_{STG}	-50 to +175							$^\circ\text{C}$

NOTES:

- (1) Measured on Tektronix Type "S" recovery plug-in. Tektronix 545 Scope or equivalent, $I_{FM}=20\text{mA}$, $I_{RM}=1\text{mA}$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

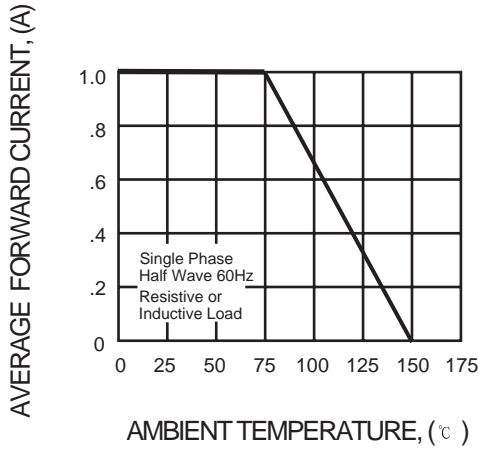


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

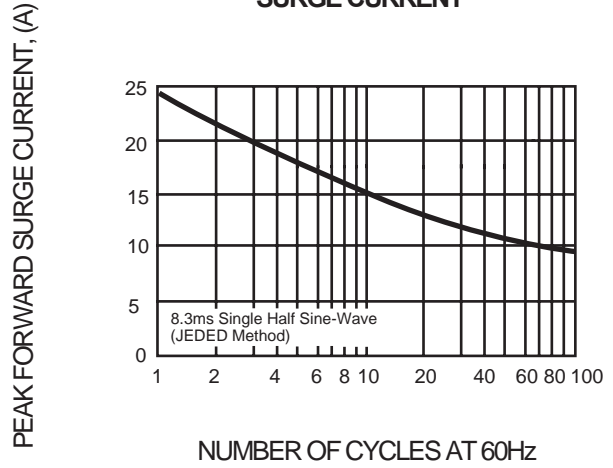


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

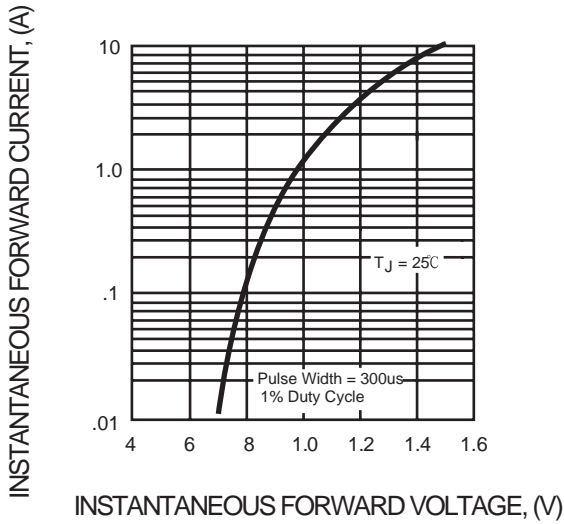


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

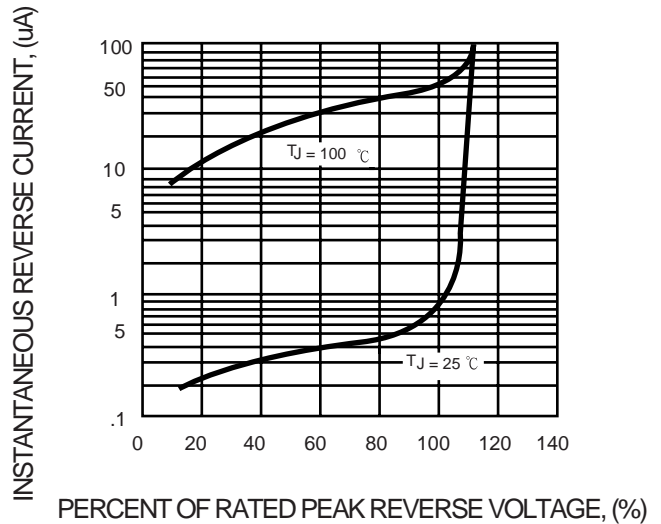


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

