

S4J

PRV : 600 Volts
Io : 0.4 Ampere

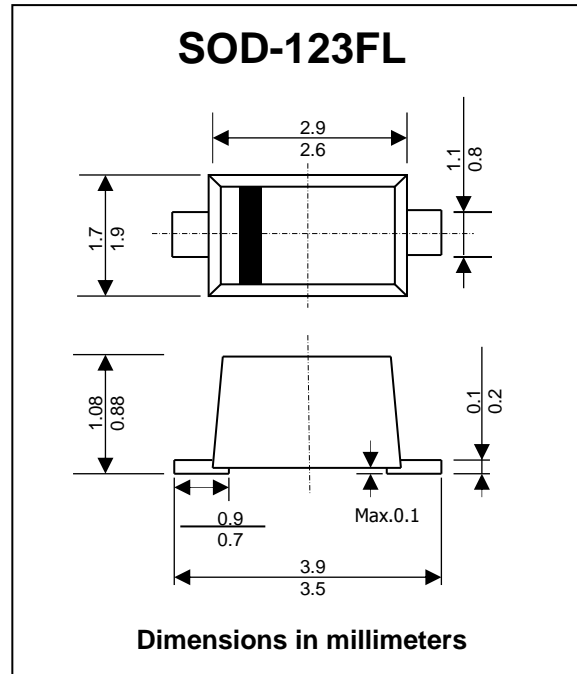
FEATURES :

- * Easy pick and place
- * For surface mounted applications
- * Low profile package
- * Superfast recoverytimes for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case: JEDEC SOD-123FL, molded plastic over passivated chip
- * Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting position : Any
- * Weight: 0.006 ounces, 0.02 gram

SURFACE MOUNT SUPER FAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

RATING	SYMBOL	S4J	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current $T_L = 120\text{ }^\circ\text{C}$	$I_{F(AV)}$	0.4	A
Maximum Peak Forward Surge Current, 8.3 ms. Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	25	A
Maximum Peak Forward Voltage at $I_F = 0.4\text{ A}$	V_F	1.32	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$	I_R	5	μA
at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	$I_{R(H)}$	100	
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35	ns
Typical Junction Capacitance (Note 2)	C_J	10	pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^\circ\text{C}$

Notes :

- (1) Reverse Recovery Test Condition : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (S4J)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

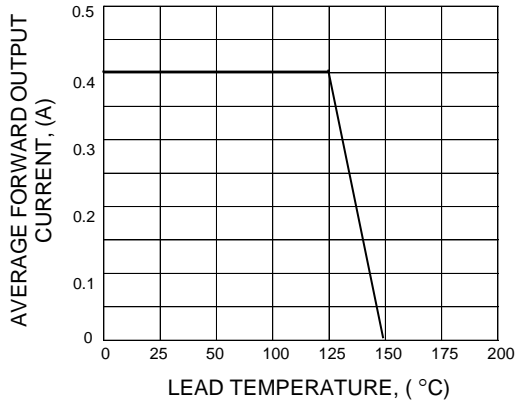


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

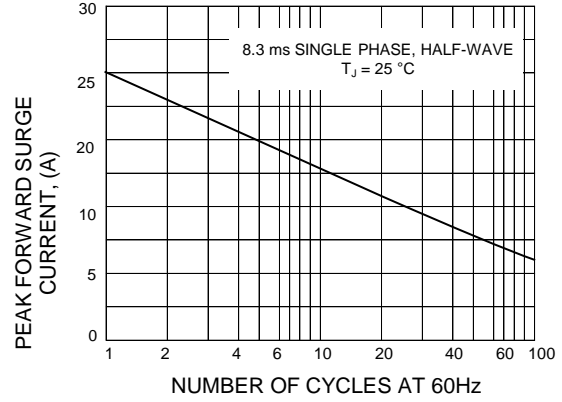


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

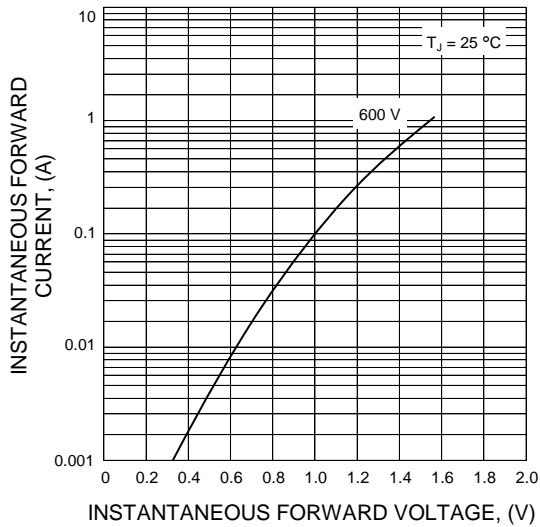


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

