

## S4J

**PRV : 600 Volts**  
**Io : 0.4 Ampere**

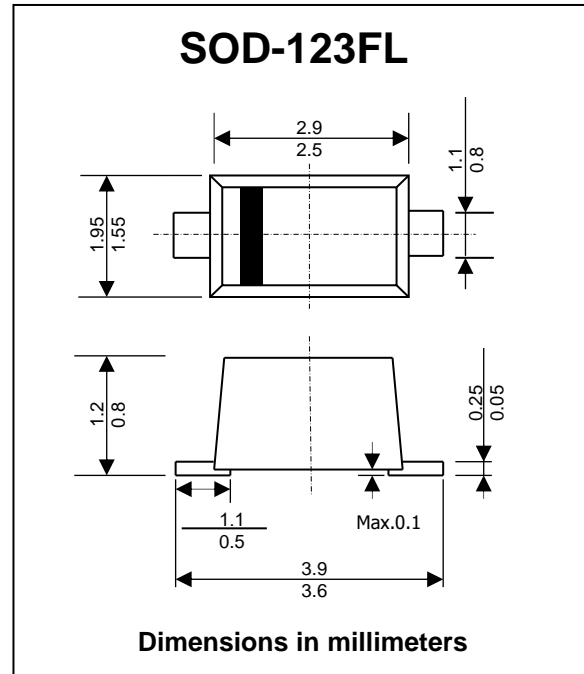
### FEATURES :

- \* 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%.

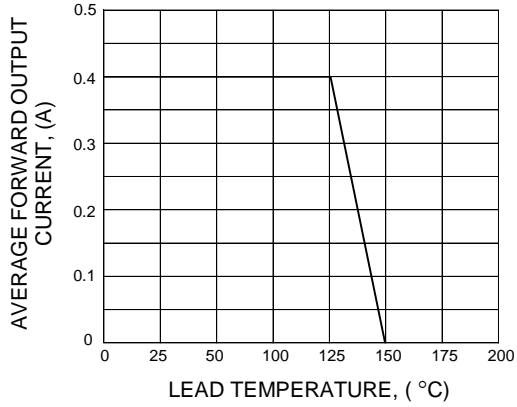
RATING	SYMBOL	S4J	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Current $T_L = 125\text{ }^\circ\text{C}$	$I_{F(AV)}$	0.4	A
Maximum Peak Forward Surge Current, 8.3 ms. Single half sine 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 at Rated DC Blocking Voltage	$I_R$	5	$\mu\text{A}$
	$I_{R(H)}$	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 :

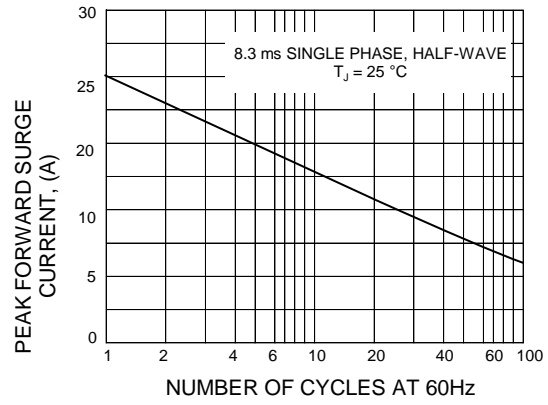
- (1) Reverse Recovery Test Condition :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

### RATING AND CHARACTERISTIC CURVES ( S4J )

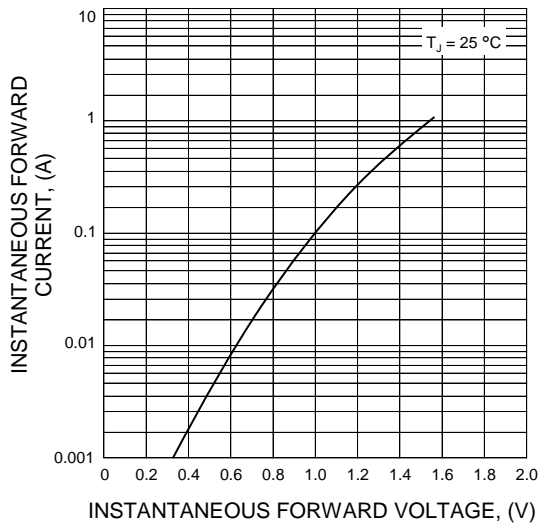
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

