



### S2A THRU S2M

VOLTAGE RANGE 50 to 1000 Volts

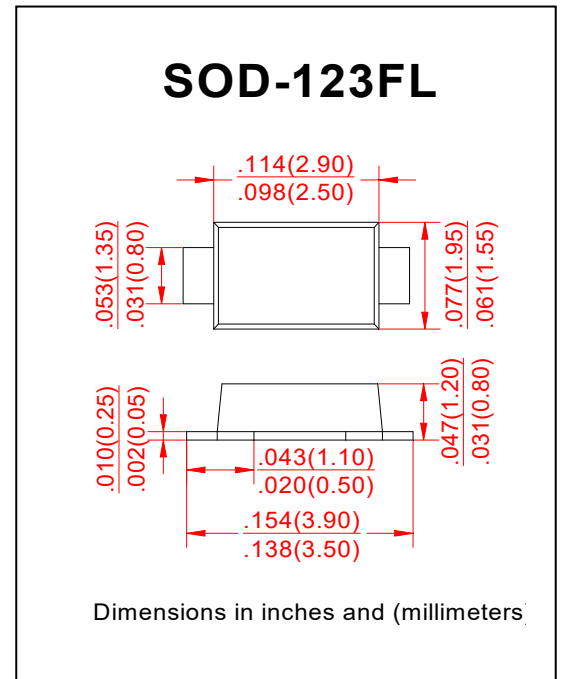
CURRENT 2.0 Ampere

### Features

- Glass passivated chip
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260°C/10S at terminals
- Component in accordance to ROHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Data

- Case: JEDEC SOD-123FL mold plastic  
Body over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denote cathode band
- Weight: 0.00063ounce, 0.018grams



### Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOL	S2A	S2B	S2C	S2D	S2G	S2K	S2M	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	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							Amps
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ C$	5.0							$\mu A$
	$T_A = 125^\circ C$	50							
Typical Junction Capacitance (NOTE 1)	$C_J$	15							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	60							$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ C$

#### Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at. 1.8×1.8mm<sup>2</sup> copper pad areas.



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## Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

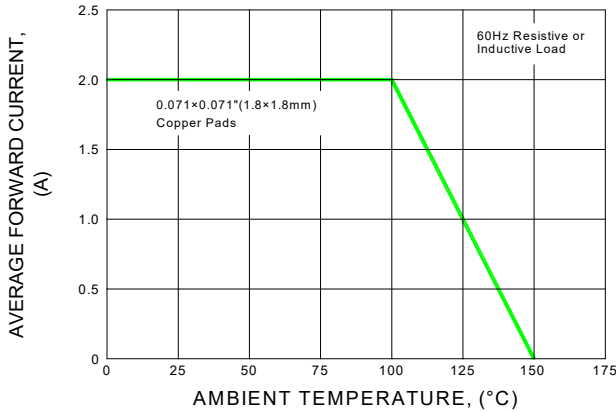


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

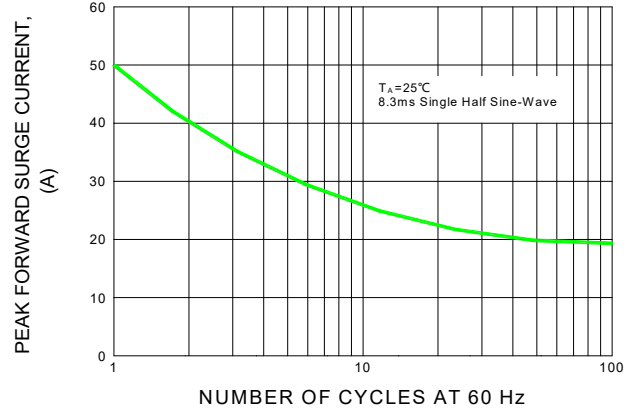


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

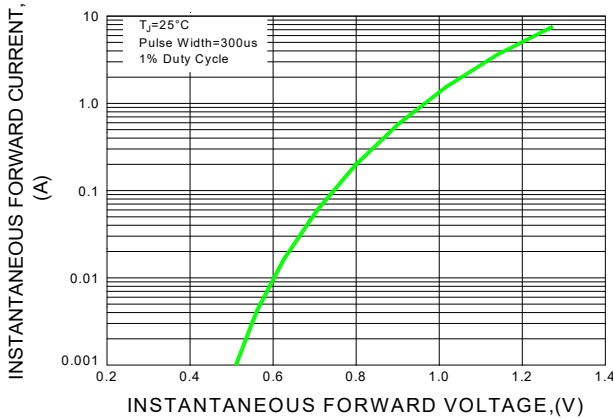


FIG.4-TYPICAL REVERSE CHARACTERISTICS

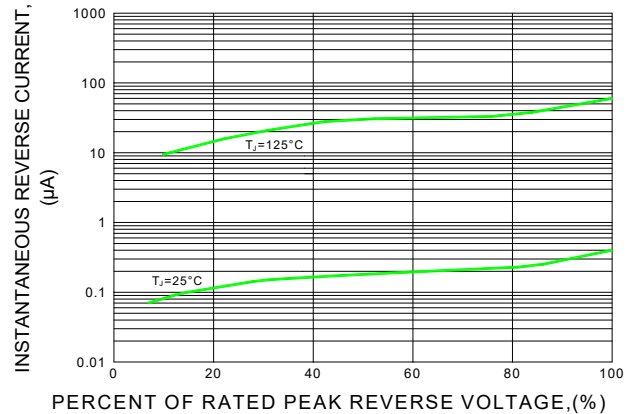


FIG.5-TYPICAL JUNCTION CAPACITANCE

