



# SHENZHEN FAITH TECHNOLOGY CO.,LTD

## SURFACE MOUNT GLASS PASSIVATED STANDARD RECTIFIER

A1 THRU A7

VOLTAGE RANGE 50 to 1000 Volts

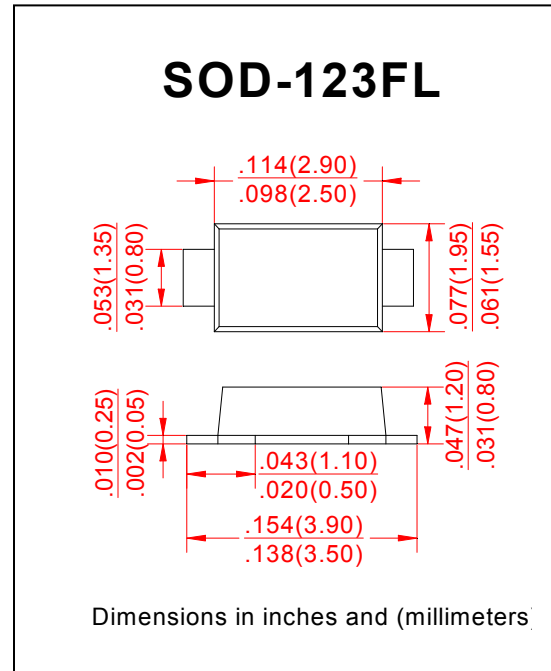
CURRENT 1.0 Ampere

### FEATURES

- Glass passivated chip:46mil
- 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



### 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	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	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A = 25^\circ C$							$\mu A$
		$T_A = 125^\circ C$							
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.  $5.0 \times 5.0mm^2$  copper pad areas.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

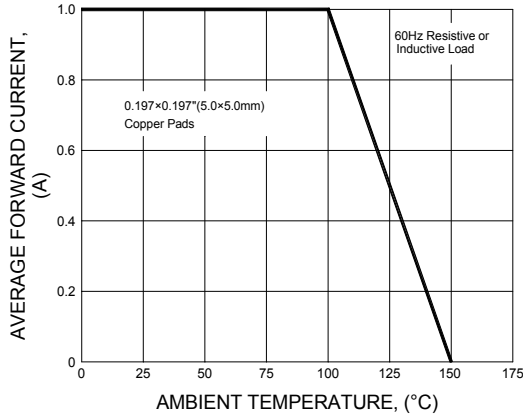


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

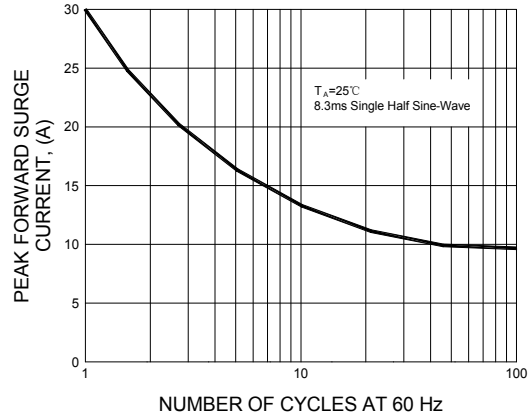


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

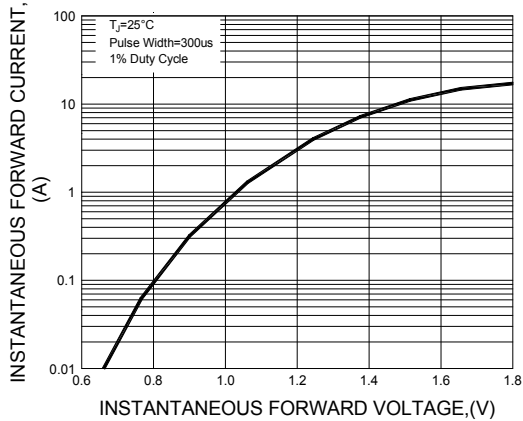


FIG.4-TYPICAL REVERSE CHARACTERISTICS

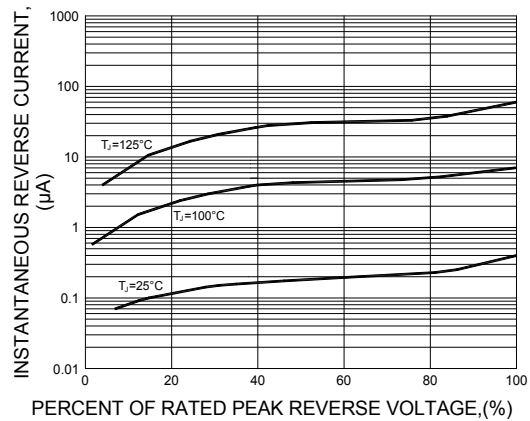


FIG.5-TYPICAL JUNCTION CAPACITANCE

