FF1AS~FF1MS

GPP SURFACE MOUNT FAST RECOVERY RECTIFIER

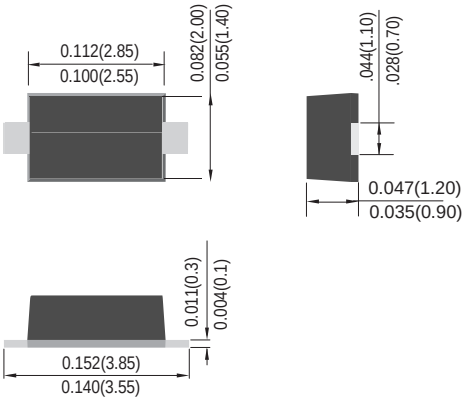
VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes

FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- In compliance with EU RoHS 2002/95/EC directives

Pb : Pb Free

SOD-123FL Unit:inch(mm)



MECHANICAL DATA

Case:SOD-123FL,Molded Plastic over passivated junction

- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0092 gram

* Lead Free Finish/RoHS Compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER		SYMBOL	FF1AS	FF1BS	FF1DS	FF1GS	FF1JS	FF1KS	FF1MS	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	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 at TA = 55℃		IO	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	30							Amps
Maximum Forward Voltage at 1.0A DC		VF	1.30							Volts
Maximum DC Reverse Current at	**@TA = 25℃**	IR	5.0							uAmps
Rated DC Blocking Voltage	**@TA = 125℃**		150							
Maximum Reverse Recovery Time (Note 3)		trr	150				250	500		nSec
Maximum Thermal Resistance (Note 2)		$R_{\theta JA}$	30							℃/W
Typical Junction Capacitance (Note 1)		CJ	15							pF
Operating and Storage Temperature Range		TJ, TSTG	-55 to +150							℃

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FF1AS	FF1BS	FF1DS	FF1GS	FF1JS	FF1KS	FF1MS	UNITS
Typical thermal resistance (Note 2)	$R_{\theta JA}$	65							℃ / W
Operating and Storage Temperature Range	T_J, T_{STG}	-50 TO +150							℃

NOTES: 1.Pulse test: 300u pulse width, 1% duty cycle.
2.Soldering land: 6mm x 6mm

RATING AND CHARACTERISTIC CURVES **FF1AS~FF1MS**

FIG.1-TYPICAL FORWARD CHARACTERISTICS

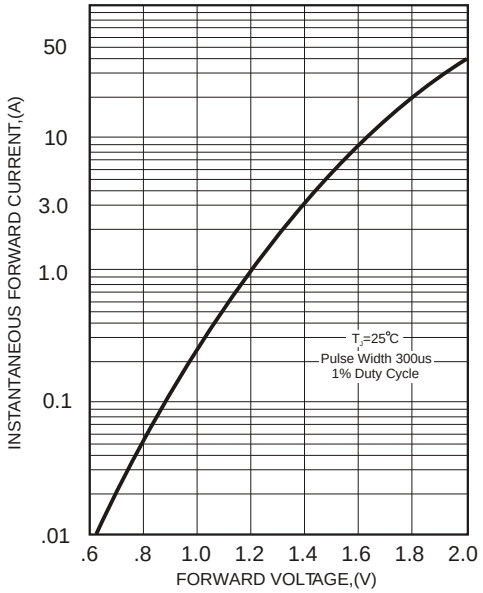


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

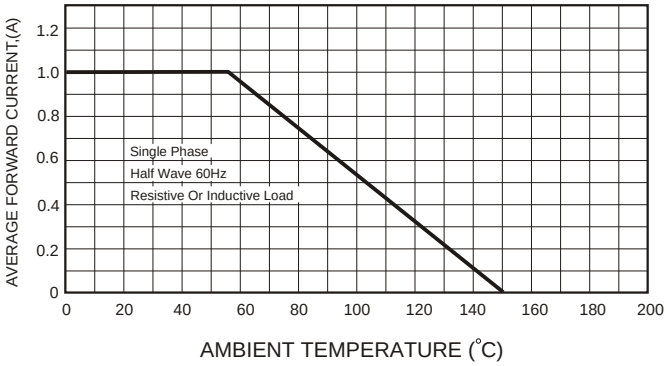
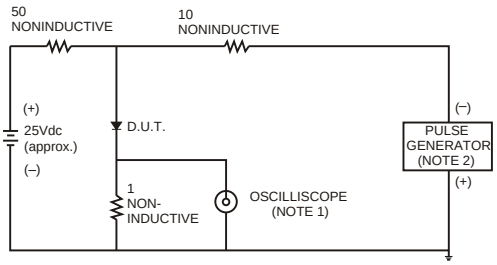
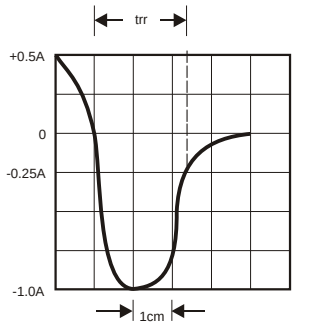


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR

50 / 10ns / cm

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

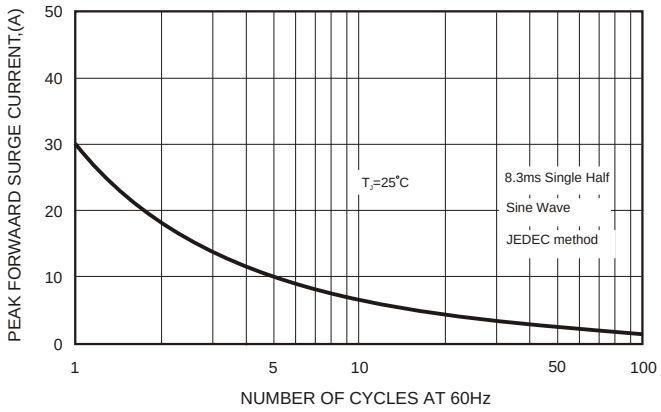
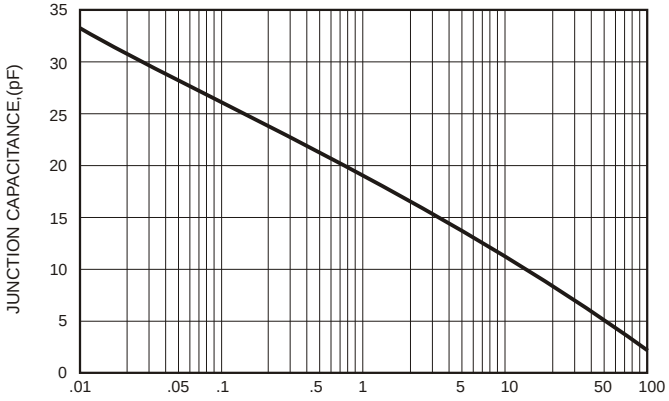


FIG.5-TYPICAL JUNCTION CAPACITANCE



MOUNTING PAD LAYOUT FF1AS~FF1MS

SOD-123FL Unit: inch (mm)