



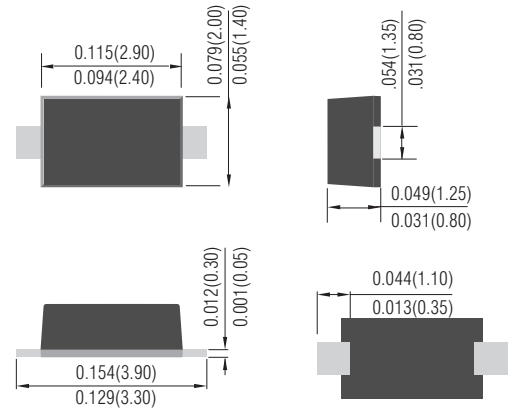
GPP SURFACE MOUNT FAST RECOVERY RECTIFIER
 VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes



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

SOD-123S Unit:inch(mm)



MECHANICAL DATA

- Case:SOD-123S,Molded Plastic over passivated junction
- Terminals: Solderable per MIL-STD-750, Method 2026

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FF1AS	FF1BS	FF1DS	FF1GS	FF1JS	FF1KS	FF1MS	UNITS
Marking Code		F1	F2	F3	F4	F5	F6	F7	
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 °C	IF(AV)	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 °C	IR	5.0							uAmps
Rated DC Blocking Voltage @TA = 125 °C		150							
Maximum Reverse Recovery Time (Note 3)	trr	150				250	500		nSec
Maximum Thermal Resistance (Note 2)	RθJL	30							°C / W
Typical thermal resistance(Note 2)	RθJA	65							°C / W
Typical Junction Capacitance (Note 1)	CJ	15							pF
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150							°C

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
 2.Soldering land: 6mm x 6mm
 3.Reverse Recovery Test Conditions:IF=0.5A,IR=1A,Irr=0.25A

DEVICE CHARACTERISTICS

FF1AS THRU FF1MS

FIG.1-TYPICAL FORWARD CHARACTERISTICS

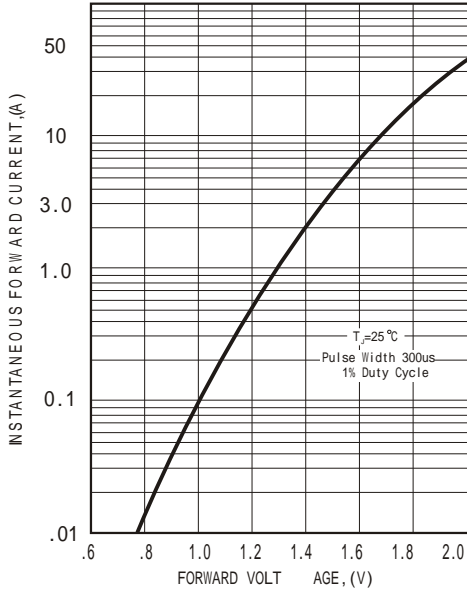


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

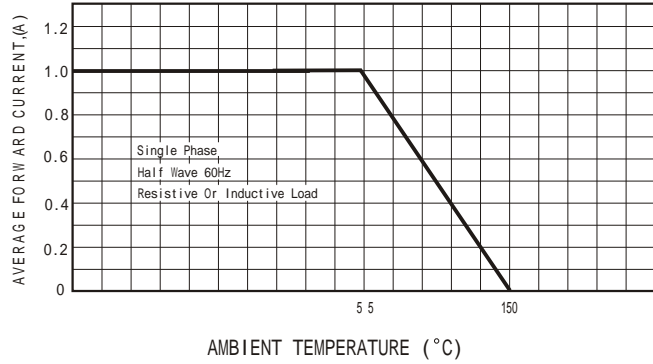


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

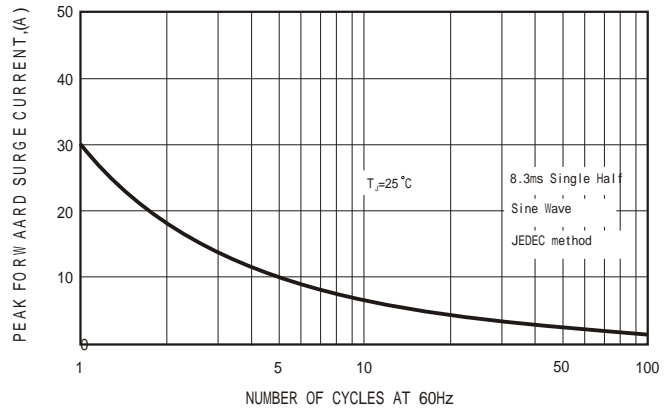
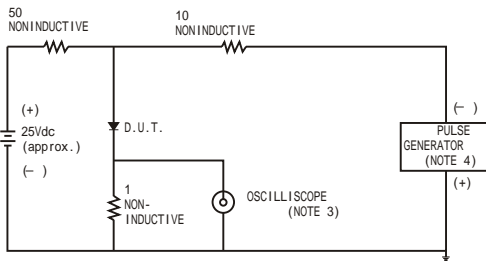


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 3. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
4. Rise Time= 10ns max., Source Impedance= 50 ohms.

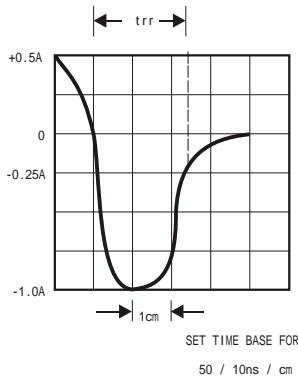
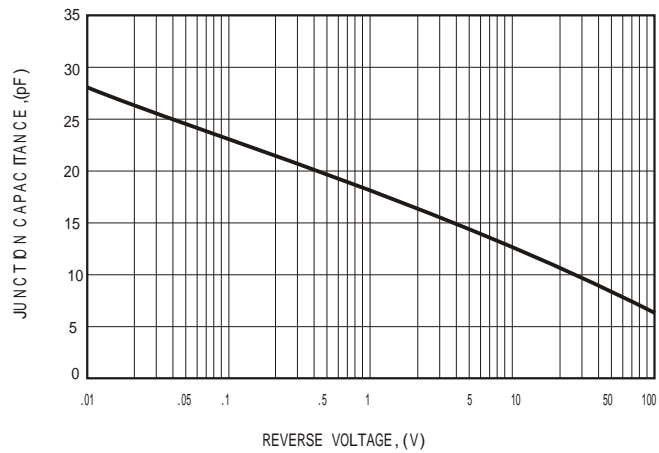


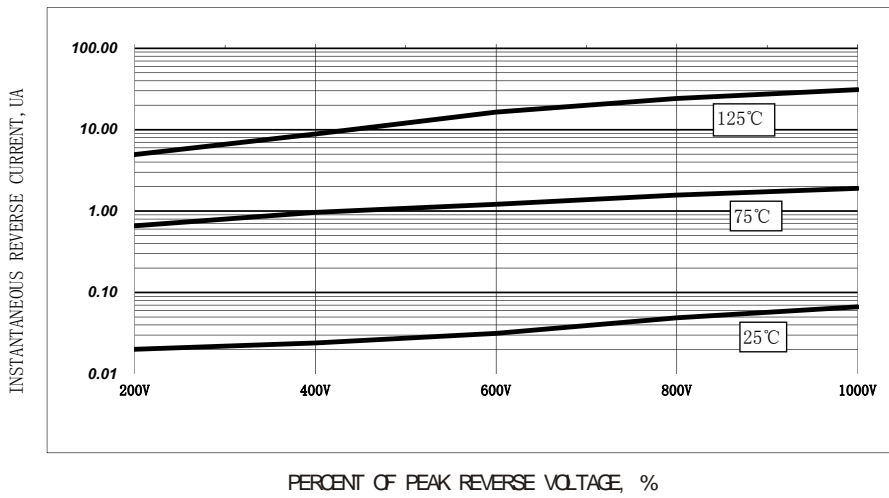
FIG.5-TYPICAL JUNCTION CAPACITANCE



DEVICE CHARACTERISTICS

FF1AS THRU FF1MS

FIG6. Typical Reverse Characteristic



MOUNTING PAD LAYOUT

SOD-123S Unit: inch (mm)

