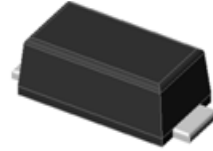


## Surface Mount Glass Passivated Standard Rectifier

**Reverse Voltage 50V ~ 1000V , Forward Current 1.0 Amps**

### Features

- Glass passivated Standard rectifiers
- Compatible with SOD-123
- **Super low VF**
- **High forward surge capability**
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- Low profile, Max height 1.08mm



**SMF**

### MECHANICAL DATA

- Case: JEDEC SOD-123 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.01 gram

### TYPICAL APPLICATIONS

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

### 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 by 20%.)

Parameter	Symbols	F1A	F2A	F3A	F4A	F5A	F6A	F7A	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 0.375"(9.5mm) lead length at TA=75°C	I(AV)	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) TA=75°C	IFSM	40							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	VF	0.97							Volts
Maximum Reverse current at rated DC Blocking Voltage	IR	5.0							μA
		50.0							
Typical Thermal resistance (Note 2)	RθJL	30							°C/W
Typical Junction Capacitance(Note 1)	CJ	15							pF
Operating and Storage temperature Range	TJ TSTG	-55 ~ +150							°C

*Note:* 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. mounted



## RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

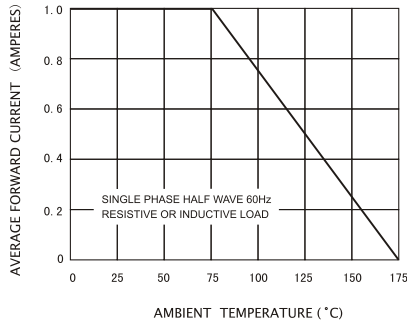


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

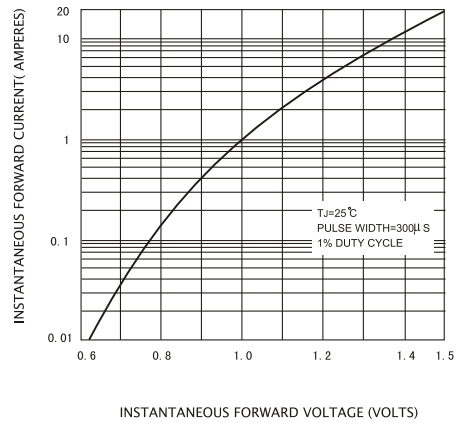


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

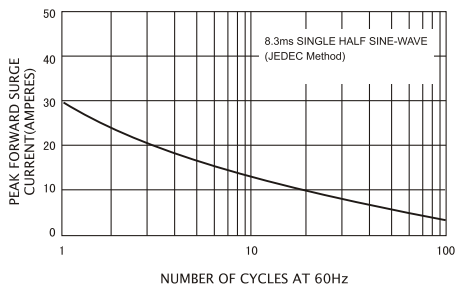


FIG.4-TYPICAL REVERSE CHARACTERISTICS

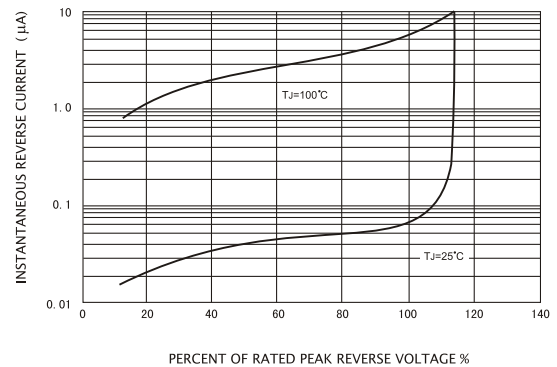
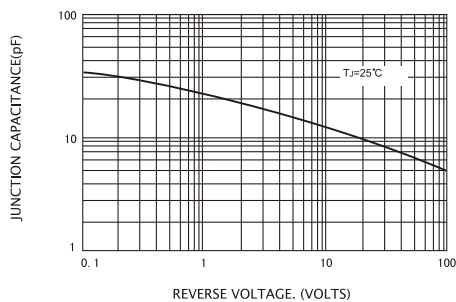


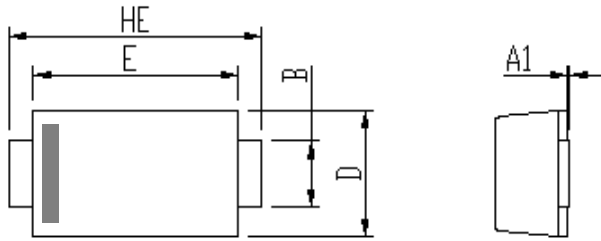
FIG.5-TYPICAL JUNCTION CAPACITANCE



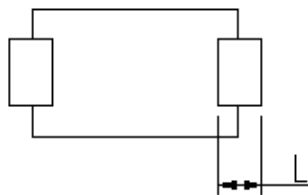
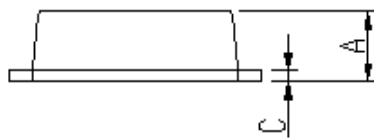


# F1A ~ F7A

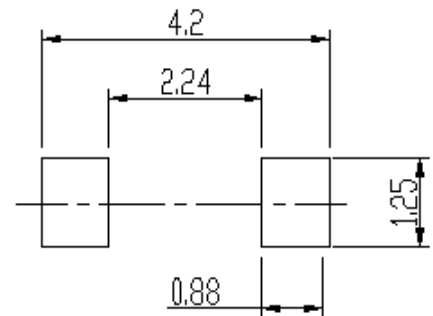
## PACKAGE OUTLINE DIMENSIONS (in millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
b	0.85	1.05	0.033	0.041
c	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
E	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154



### Soldering footprint



## PACKING INFORMATION

### Packing quantities:

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

### Tape & Reel Specification

