

Fast Recovery Rectifier Diode

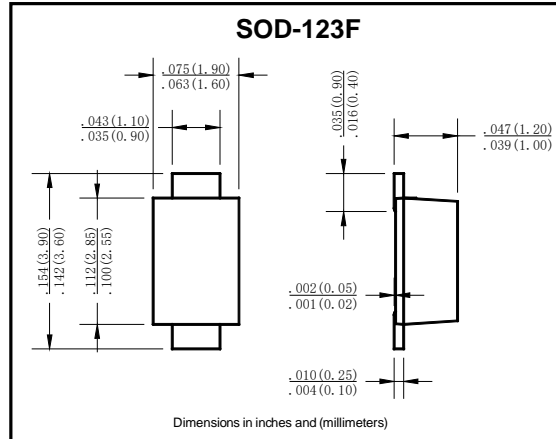
■ Features

- I_o 1.0A
- V_{RRM} 50V~1000V
- Glass passivated chip
- High surge forward current capability
- AEC-Q101 qualified

■ Applications

- For general power supply single-phase rectifier

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	F1						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_o	A	60Hz One-way half-wave, R-load, $T_a=75^\circ\text{C}$	1.0						
Surge(Nonrepetitive) Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$	30						
Storage Temperature	T_{stg}	$^\circ\text{C}$		-55~+150						
Junction Temperature	T_j	$^\circ\text{C}$		-55~+150						

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	F1						
				A	B	D	G	J	K	M
Peak Forward Voltage	V_{FM}	V	$I_{FM}=1.0A$	1.3						
Maximum reverse recovery time	t_{rr}	ns	$I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$	150			250		500	
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}, T_a=25^\circ\text{C}$	5						
Thermal Resistance	$R_{\theta J-L}$	$^\circ\text{C/W}$	Between junction and lead	20						
Typical junction capacitance	C_j	pF	4.0 V, 1MHz	15						



F1A ~ F1M

Characteristics(Typical)

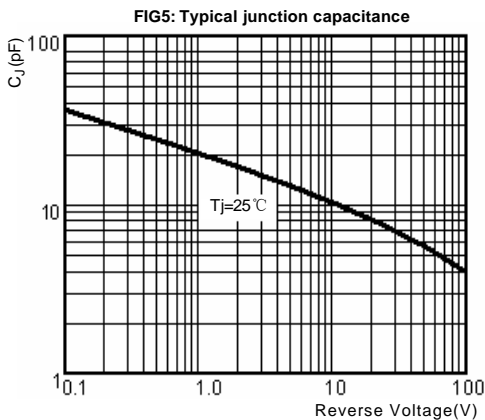
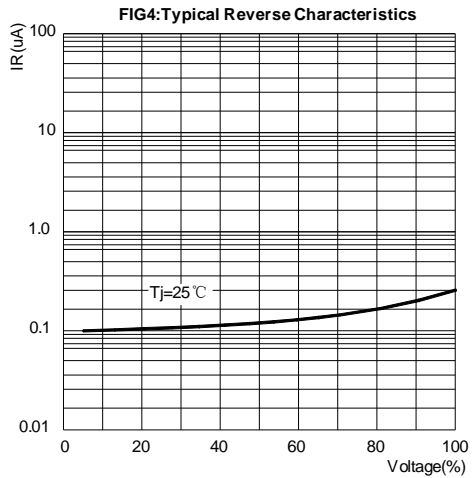
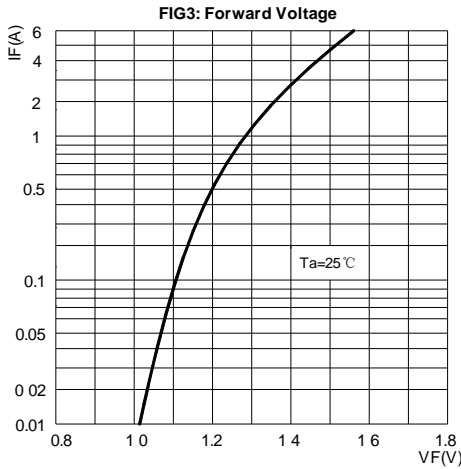
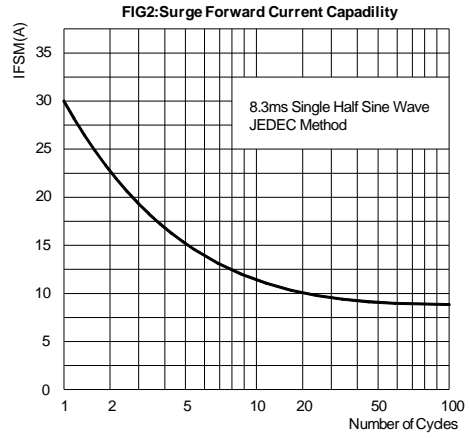
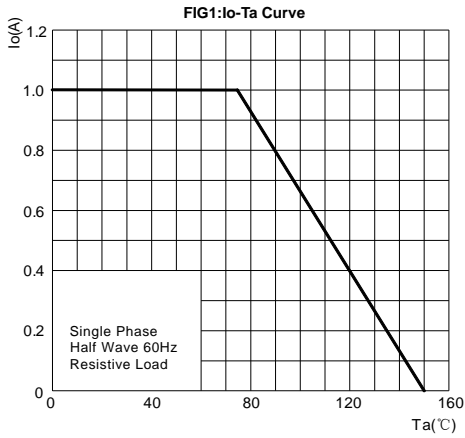
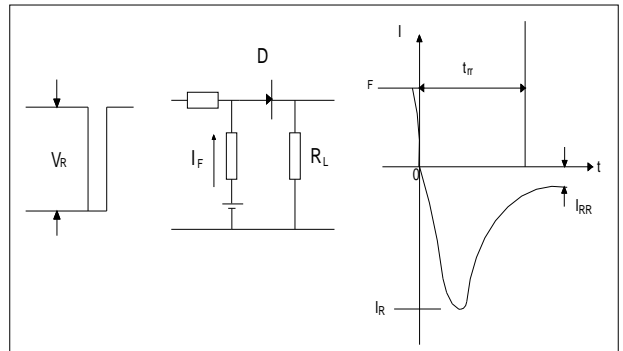


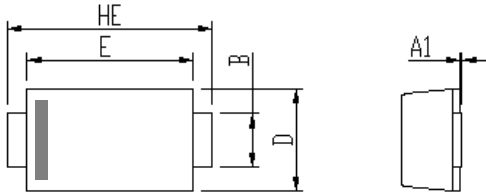
FIG6: Diagram of circuit and Testing wave form of reverse recovery time



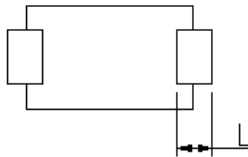
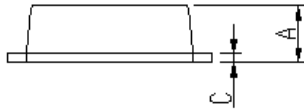


F1A ~ F1M

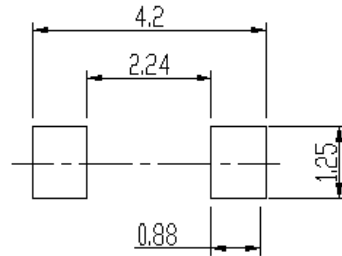
PACKAGE OUTLINE DIMENSIONS (in millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	1.0	1.2	0.035	0.043
A1	0	0.1	0.000	0.004
b	0.90	1.10	0.033	0.041
c	0.1	0.25	0.004	0.010
D	1.6	1.9	0.067	0.079
E	2.5	2.9	0.114	0.122
L	0.40	0.90	0.017	0.033
HE	3.6	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

