

## Features

- Low  $V_F$  Schottky barrier rectifiers
- Low profile
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



Package: eSGA  
 (SOD-123FL)

## Applications

For use in fast switching in RF module, lighting, cell phone, portable devices, power supply and other consumer applications.

## Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	FSL32	FSL33	FSL34	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$		3.0		A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	$I_{FSM}$		30		A
Operating Junction Temperature Range	$T_J$		-55 to +125		°C
Storage Temperature Range	$T_{STG}$		-55 to +150		°C

## Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	Value	Unit
Instantaneous Forward Voltage	3 A	$V_F$	0.46	V
Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	$I_R$	1.0	mA
	$T_A=125^\circ\text{C}$		60	
Junction Capacitance	4.0 V, 1 MHz	$C_J$	160	pF
Typical Thermal Resistance <sup>1)</sup>	Junction to Mount	$R_{\theta JM}$	25	°C/W

Note:1) The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 5×5mm copper pads, 2 OZ, FR4 PCB

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

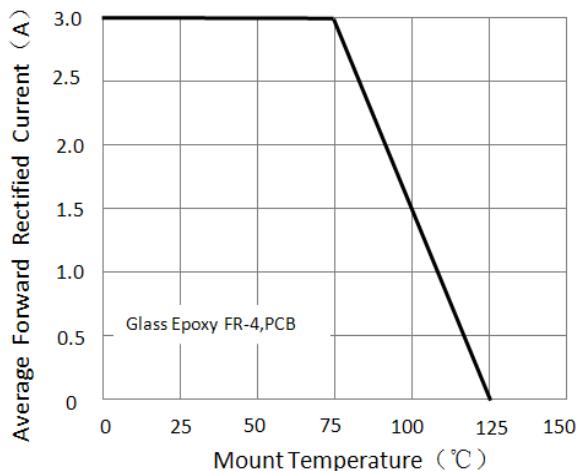


Figure 1. Forward Current Derating Curve

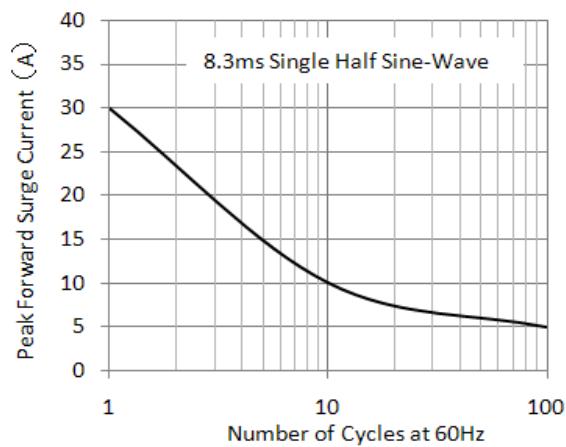


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

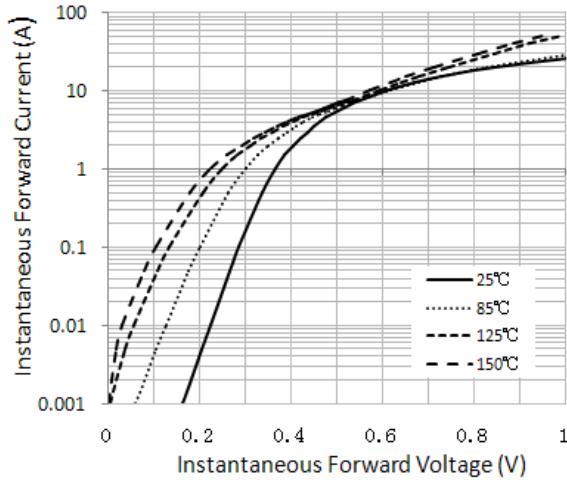


Figure 3. Typical Instantaneous Forward Characteristics

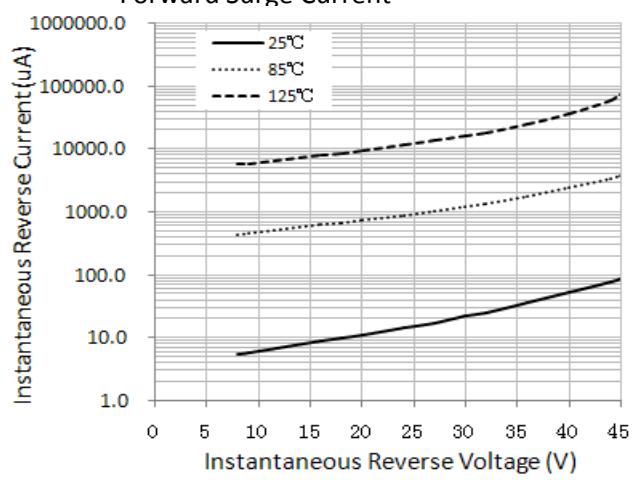


Figure 4. Typical Reverse Characteristics

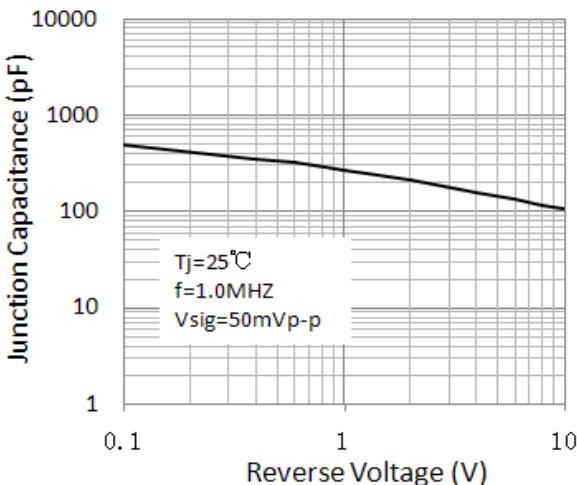
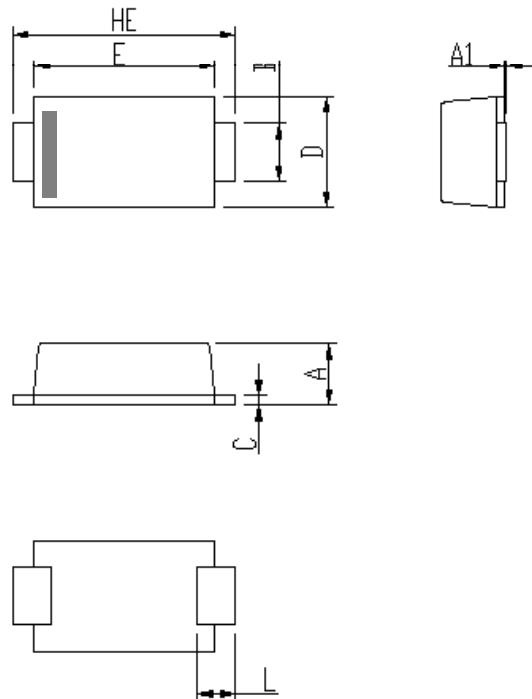


Figure 5. Typical Junction Capacitance

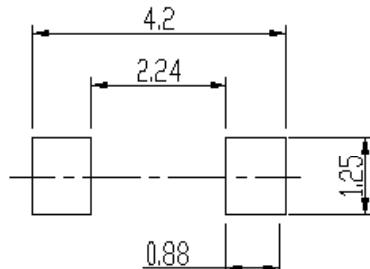
## Package Outline Dimensions

eSGA (SOD-123FL)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.40	0.035	0.055
A1	0	0.1	0.000	0.004
B	0.8	1.2	0.032	0.047
C	0.1	0.25	0.004	0.018
D	1.6	2.05	0.063	0.079
E	2.6	3.1	0.118	0.122
L	0.35	0.85	0.013	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 Spec

