

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 ¹⁾	Juntion 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)

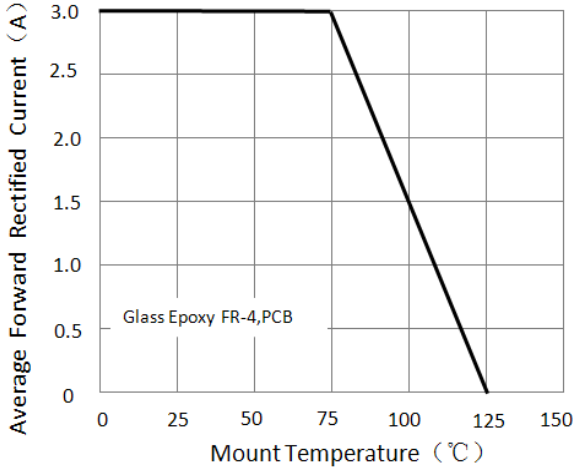


Figure 1. Forward Current Derating Curve

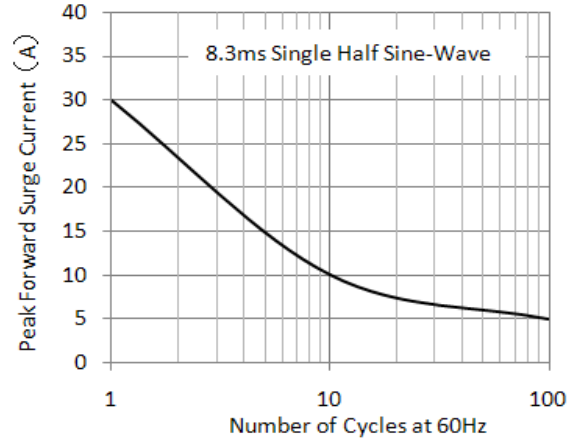


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

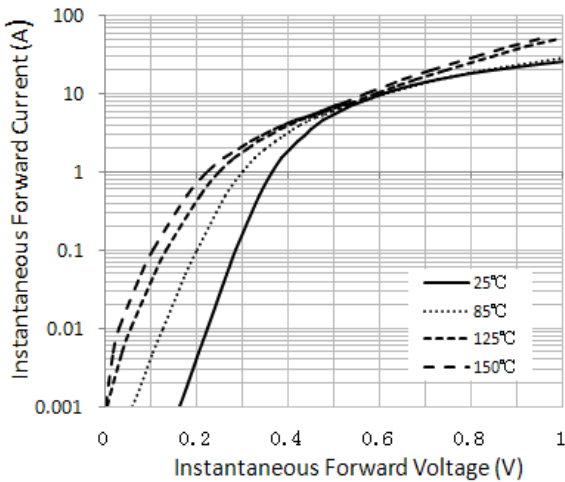


Figure 3. Typical Instantaneous Forward Characteristics

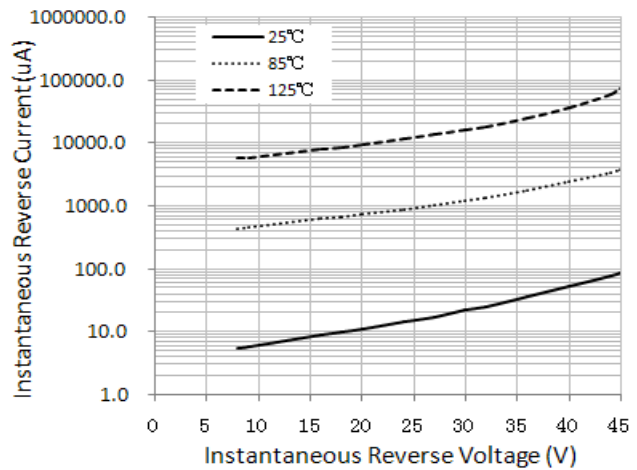


Figure 4. Typical Reverse Characteristics

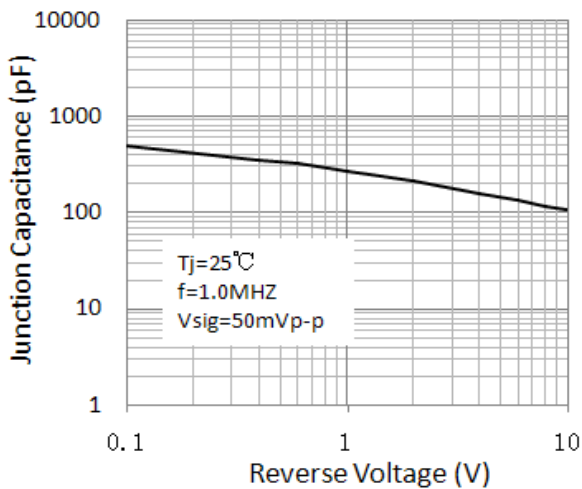
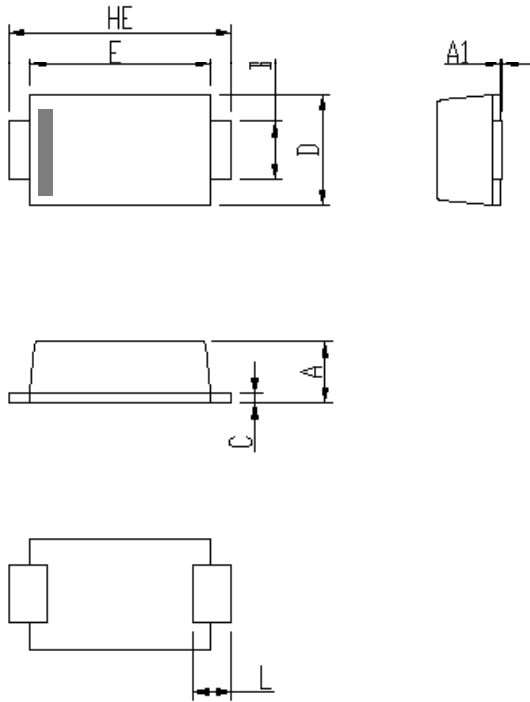


Figure 5. Typical Junction Capacitance

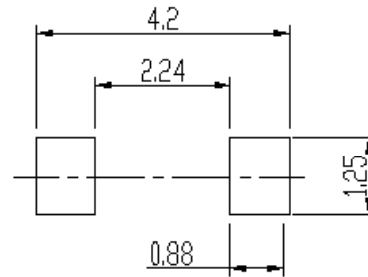
Package Outline Dimensions

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

