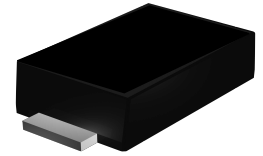


FS32 thru FS345

Surface Mount Schottky Rectifier
Reverse Voltage 20-45V Forward Current 3A

Features

- Low V_F schottky barrier rectifiers
- Low profile - typical height 1.0 mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- 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	FS32	FS33	FS34	FS345	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	45	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}^{(1)}$	3.0				A
	$I_{F(AV)}^{(2)}$	2.0				
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	60				A
Operating Junction Temperature Range	T_J	- 55 to + 150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150				$^\circ\text{C}$

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

Parameter	Test Conditions	Symbol	FS32	FS33	FS34	FS345	Unit
Maximum Instantaneous Forward Voltage	$I_F=3\text{A}$	V_F	0.51				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	30				μA
	$T_A=125^\circ\text{C}$		10				mA
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	195				pF
Typical Thermal Resistance	Junction to Mount ⁽¹⁾	$R_{\theta JM}$	30				$^\circ\text{C/W}$
	Junction to Ambient ⁽²⁾	$R_{\theta JA}$	100				

Note:1) The thermal resistance from junction to mount, mounted on aluminum P.C.B with recommended copper pads

2) The thermal resistance from junction to ambient, mounted on P.C.B with 5x5mm copper pads, 2 OZ, FR4 PCB

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

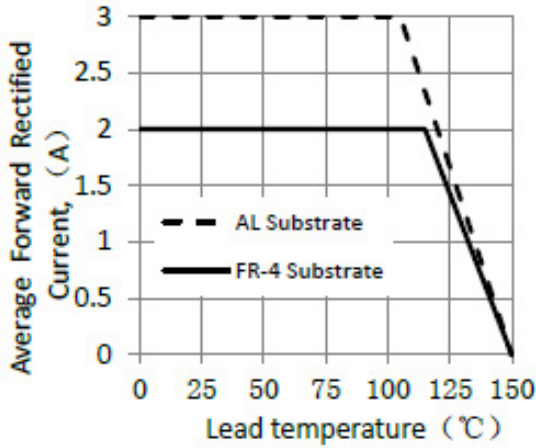


Figure 1. Forward Current Derating Curve

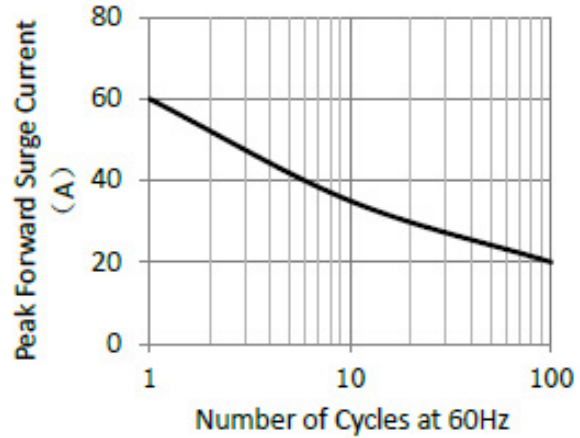


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

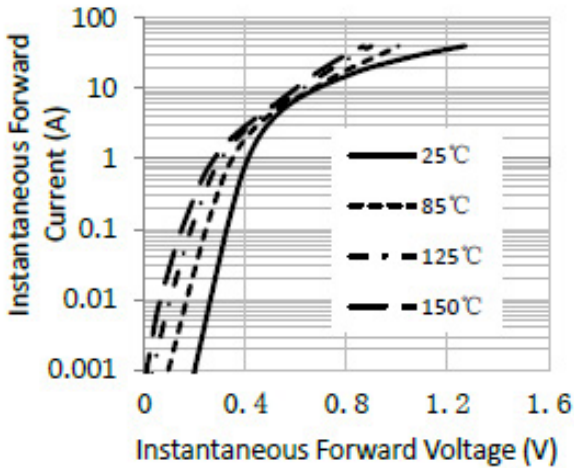


Figure 3. Typical Instantaneous Forward Characteristics

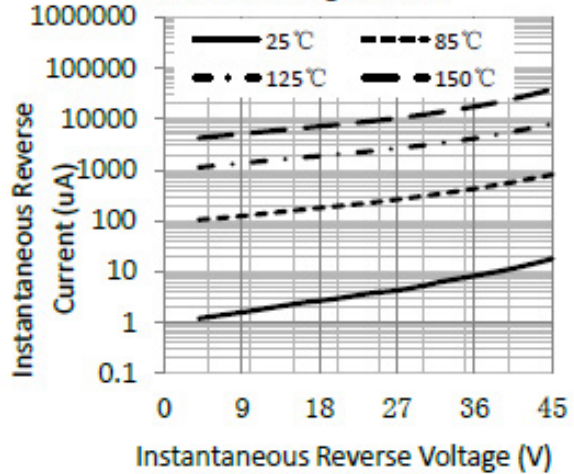


Figure 4. Typical Reverse Characteristics

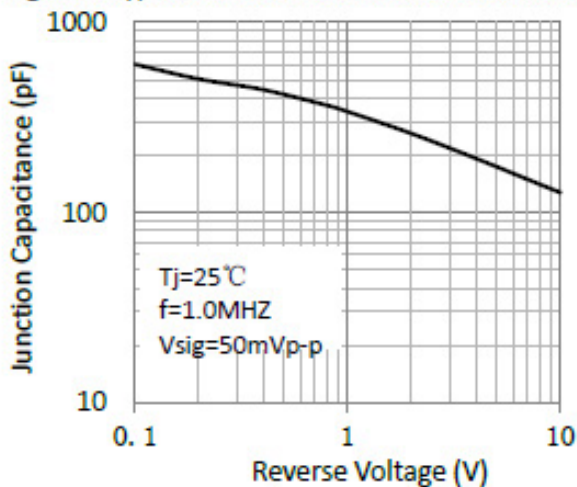


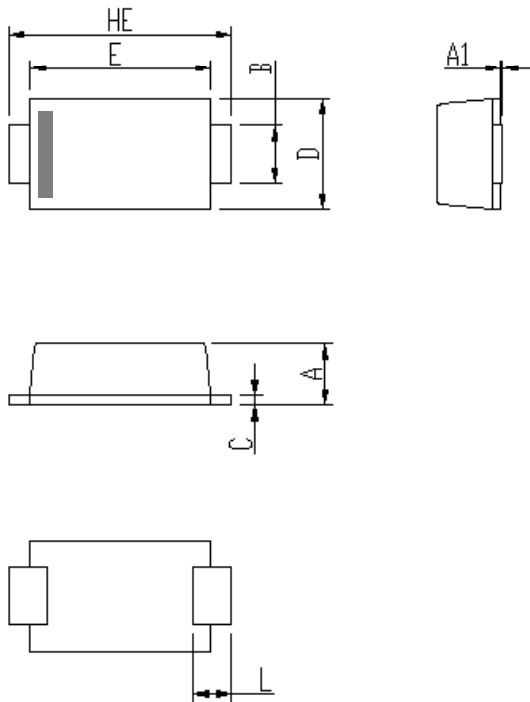
Figure 5. Typical Junction Capacitance

FS32 thru FS345

Surface Mount Schottky Rectifier
Reverse Voltage 20-45V Forward Current 3A

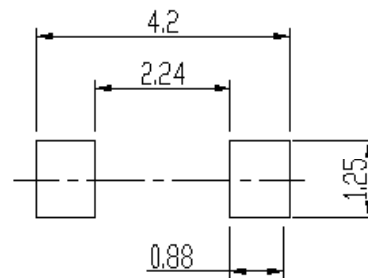
Package Outline Dimensions

eSGA (SOD-123FL)



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 Spec

