GOOD-ARK
SEMICONDUCTOR

FS36

Surface Mount Schottky Rectifier
Reverse Voltage 60V 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

RoHS COMPLIANT



Package: eSGA
(SOD-123FL)

Applications

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

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	FS36	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	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	°C
Storage Temperature Range	T_{STG}	- 55 to + 150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	FS36	Unit
Maximum Instantaneous Forward Voltage	I_F=3A	V_F	0.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	200	μA
	T_A=125℃		30	mA
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	135	pF
Typical Thermal Resistance	Juntion to Mount 1)	$R_{\theta JM}$	30	℃/W
	Juntion 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 5×5mm copper pads, 2 OZ, FR4 PCB

Ratings and Characteristics Curves (T_A = 25°C unlessotherwise noted)

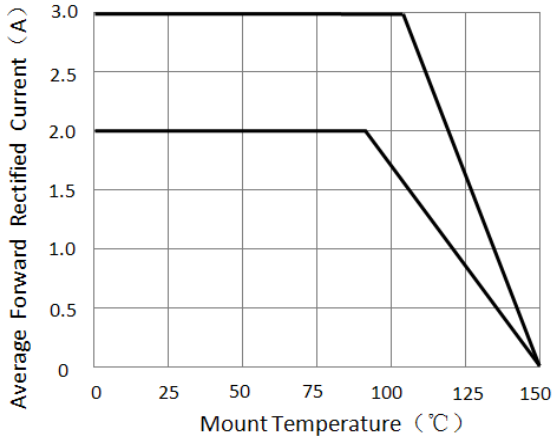


Figure 1.Forward Current Derating Curve

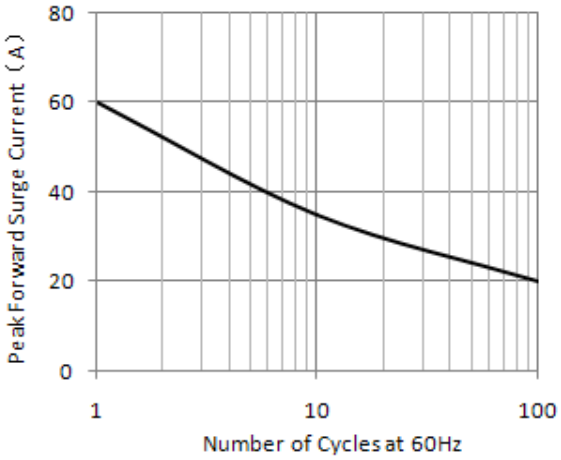


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

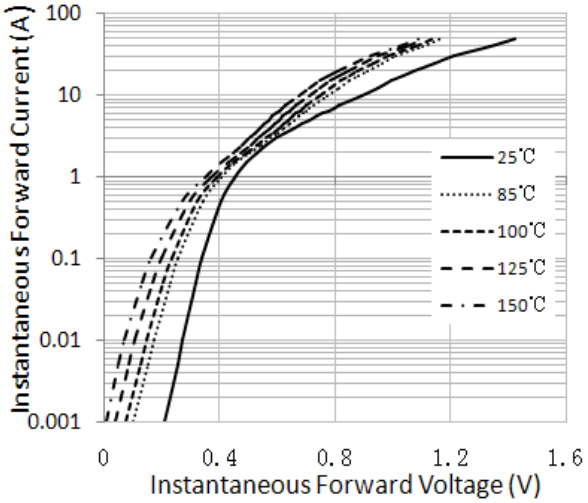


Figure 3. Typical Instantaneous Forward Characteristics

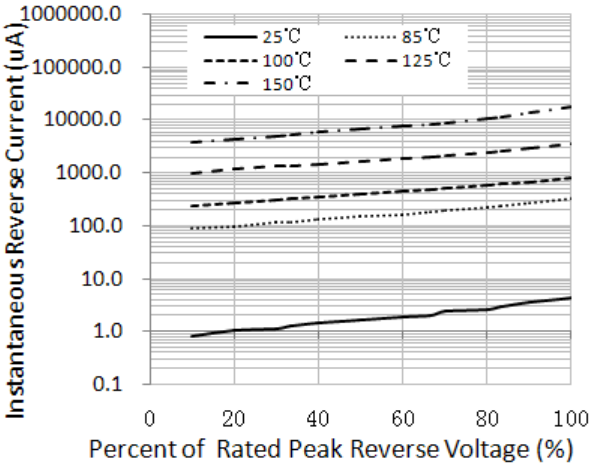


Figure 4. Typical Reverse Characteristics

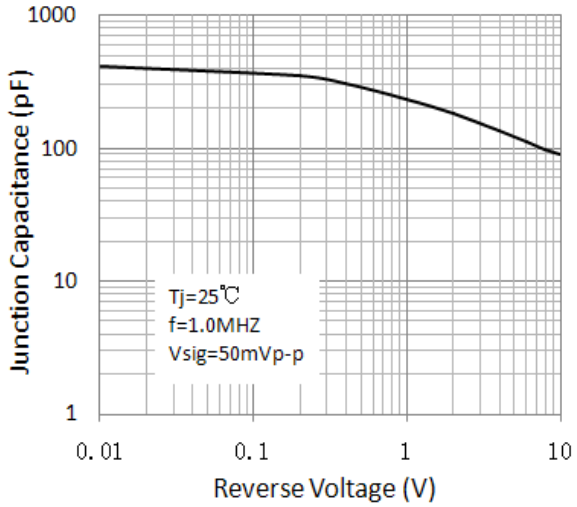
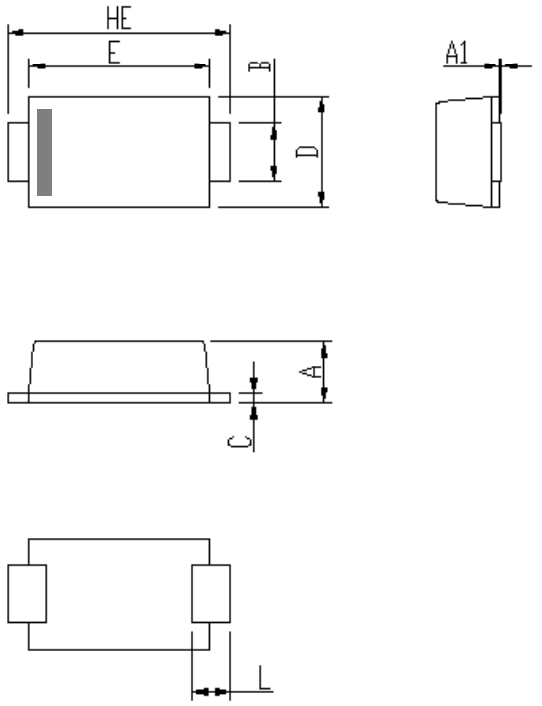


Figure 5. Typical Junction Capacitance

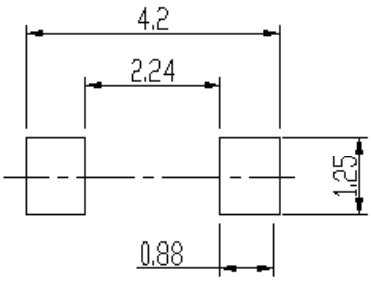
Package Outline Dimensions

eSGA (SOD-123FL)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	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

