GOOD-ARK
SEMICONDUCTOR

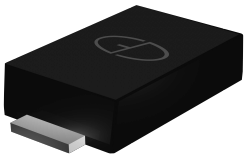
FS2B5H-FS2CH

Surface Mount Schottky Rectifier
Reverse Voltage 150-200V Forward Current 2A

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	FS2B5H	FS2CH	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	200	V
Maximum RMS Voltage	V_{RMS}	105	140	V
Maximum DC Blocking Voltage	V_{DC}	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0		A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	50		A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150		°C

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

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage	I_F=2A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	200	μA
	T_A=125°C		30	mA
Typical Thermal Resistance[1)]	Junction to Ambient	$R_{\theta JA}$	85	°C/W
	Juntion to Case	$R_{\theta JC}$	45	
	Juntion to Lead	$R_{\theta JL}$	20	

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°C unlessotherwise noted)

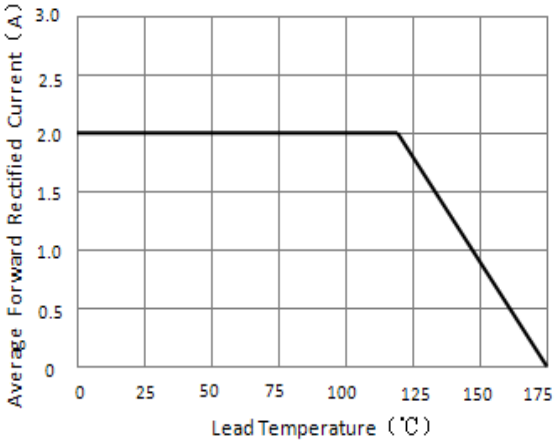


Figure 1.Forward Current Derating Curve

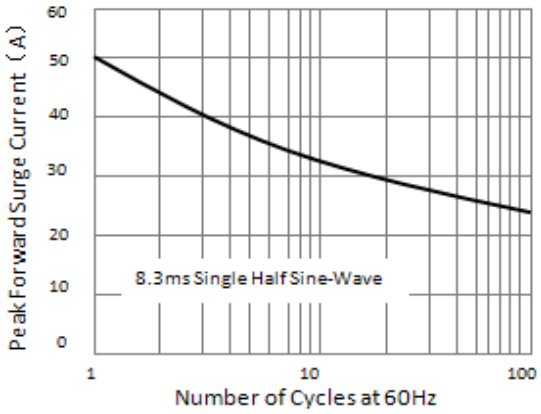


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

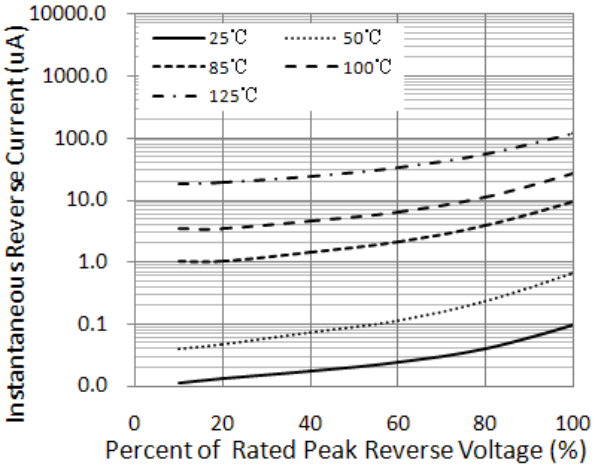


Figure 3. Typical Instantaneous Reverse Characteristics

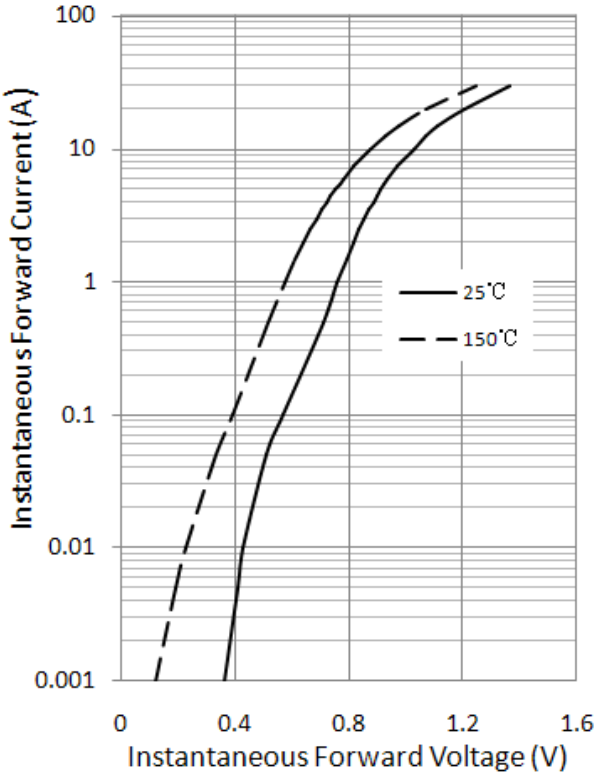


Figure 4. Typical Instantaneous Forward Characteristics

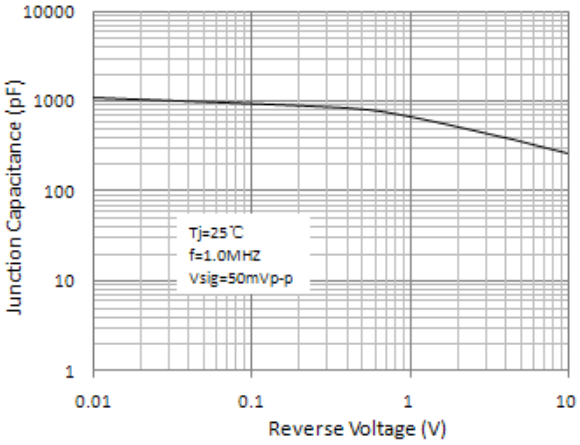
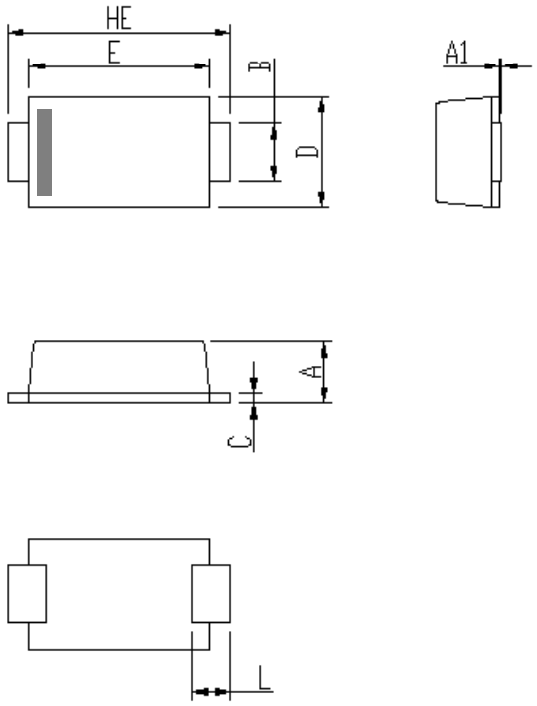


Figure 5. Typical Junction Capacitance

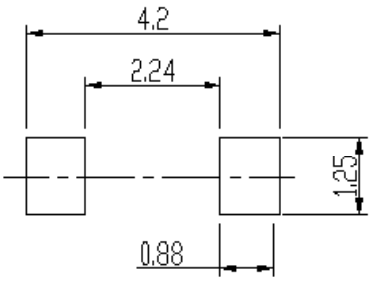
Package Outline Dimensions

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