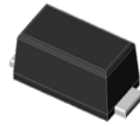


Features

- Low VF Schottky barrier diodes
- Very low profile - typical height of 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



eSGA
(SOD-123FL)

TYPICAL APPLICATIONS

For use of fast switching in RF module, lighting, cellular phone, portable device, power supplies and other consumer applications.

MAXIMUM RATINGS (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	FS12	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	20	V
Maximum RMS voltage	V _{RMS}	14	V
Maximum DC blocking voltage	V _{DC}	20	V
Maximum average forward rectified current	I _{F(AV)}	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	40	A
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)				
PARAMETER	TEST CONDITIONS	SYMBOL	FS12	UNIT
Instantaneous forward voltage	I _F =1 A, TA= 25	V _F	TYP:0.39; MAX:0.45	Volts
	I _F =1 A, TA= 125		TYP:0.30	
Maximum DC reverse current at rated DC blocking voltage	TA=25	I _R	0.2	mA
	TA=125		10	
Typical junction capacitance	4.0 V, 1 MHz	C _J	71	pF
Typical thermal resistance	junction to lead	R _{θJL} ⁽¹⁾	20	°C/W

Note1): Mounted on PCB with 5.0×5.0mm copper pads, 2 OZ, FR4 PCB;

RATINGS AND CHARACTERISTICS CURVES

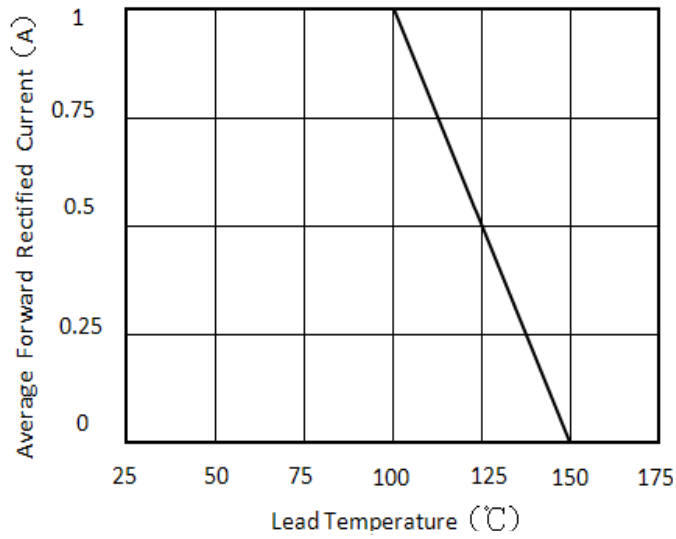


Figure 1. Forward Current Derating Curve

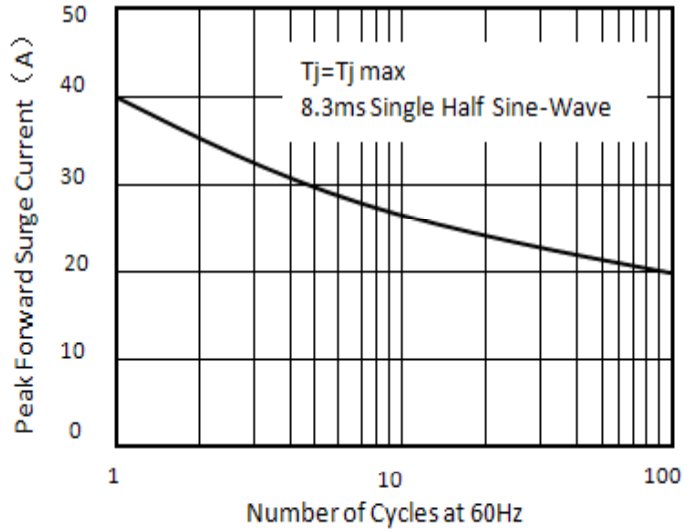


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

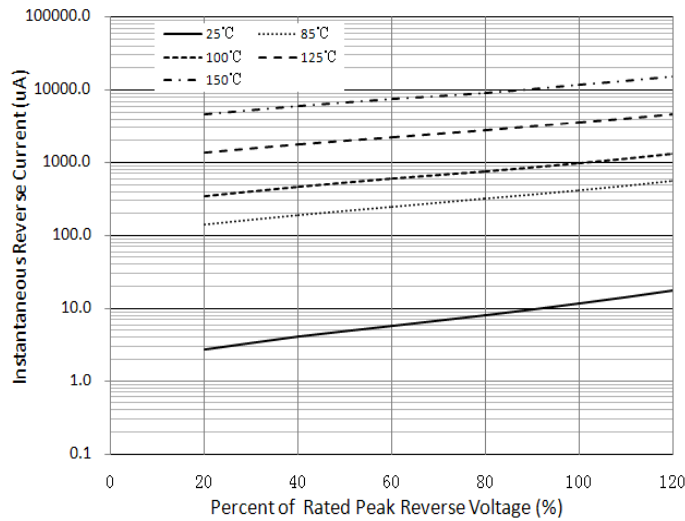


Figure 3. Typical Reverse Characteristics

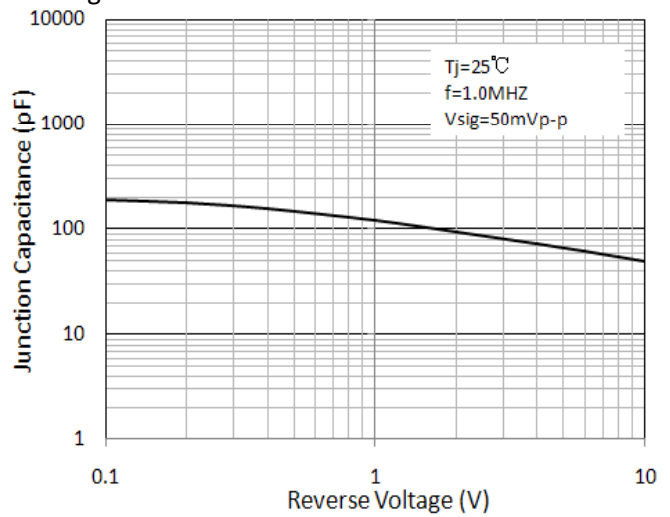


Figure 4. Typical Junction Capacitance

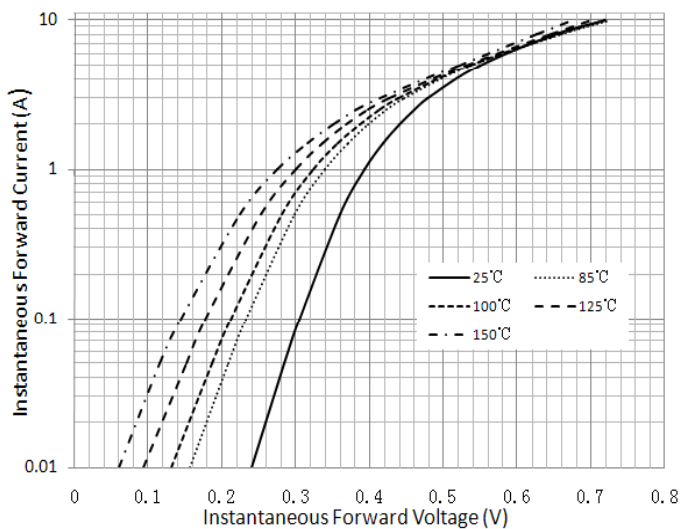
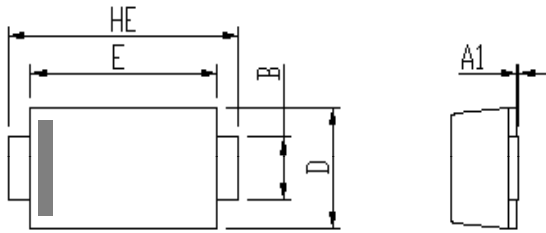
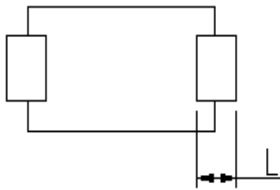
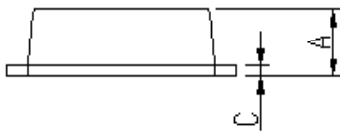


Figure 5. Typical Instantaneous Forward Characteristics

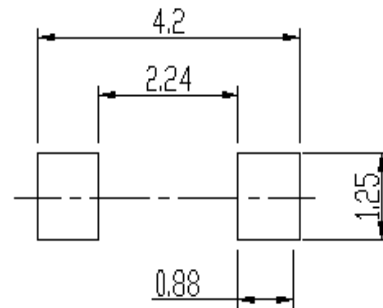
PACKAGE OUTLINE DIMENSIONS



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 Specification

