

Features

- Super 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	FS32	FS33	FS34	FS345	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	45	V
Maximum RMS voltage	VRMS	14	21	28	31.5	V
Maximum DC blocking voltage	VDC	20	30	40	45	V
Maximum average forward rectified current	IF(AV) ¹⁾	3.0				A
	IF(AV) ²⁾	2.0				
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60				A
Operating junction temperature range	T _J	- 55 to + 150				°C
Storage temperature range	T _{STG}	- 55 to + 150				°C

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

Parameter	Test Conditions	Symbol	FS32	FS33	FS34	FS345	Unit
Maximum instantaneous forward voltage	IF=3A,TA=25°C	V _F	0.51				Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	30				uA
	TA=125°C		10				mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	195				pF
Typical thermal resistance	junction to mount ¹⁾	R _{θJM}	30				°C/W
	junction to ambient ²⁾	R _{θJA}	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

(TA = 25°C unless otherwise noted)

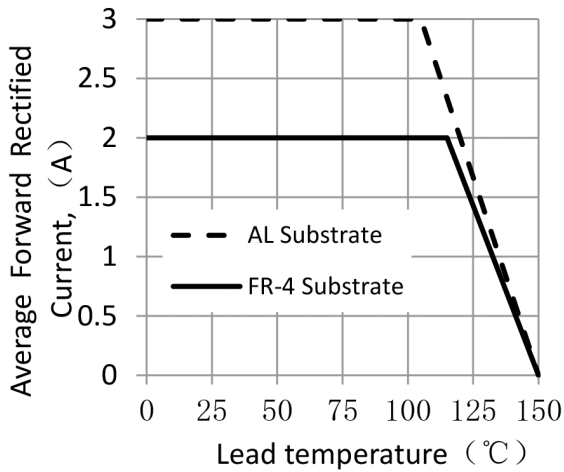


Figure 1. Forward Current Derating Curve

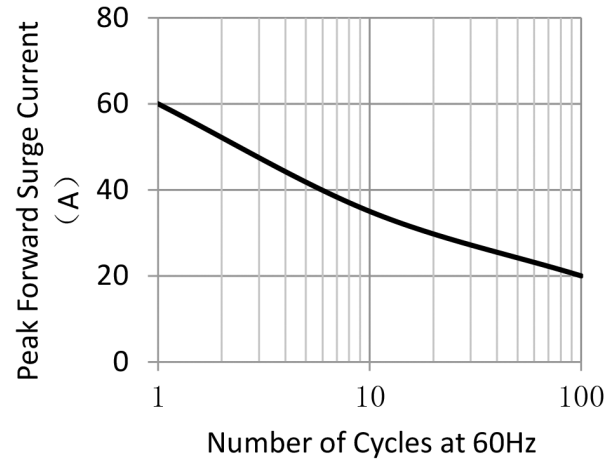


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

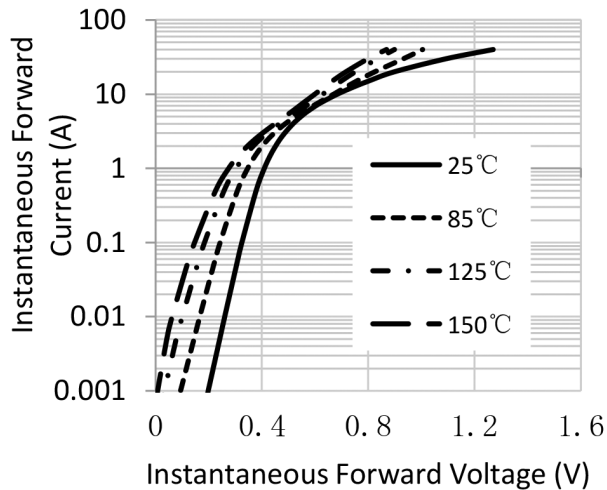


Figure 3. Typical Instantaneous Forward Characteristics

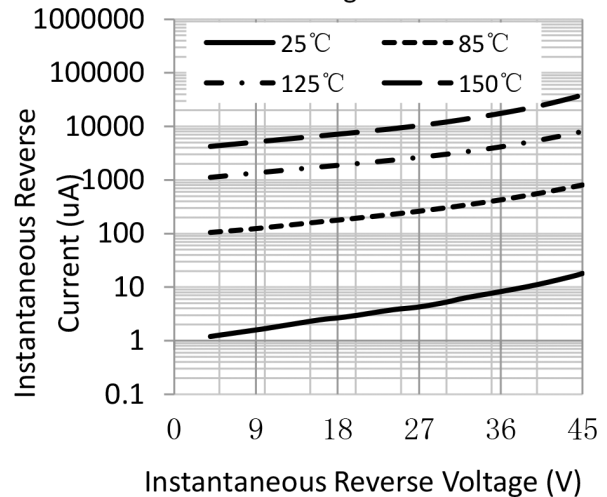


Figure 4. Typical Reverse Characteristics

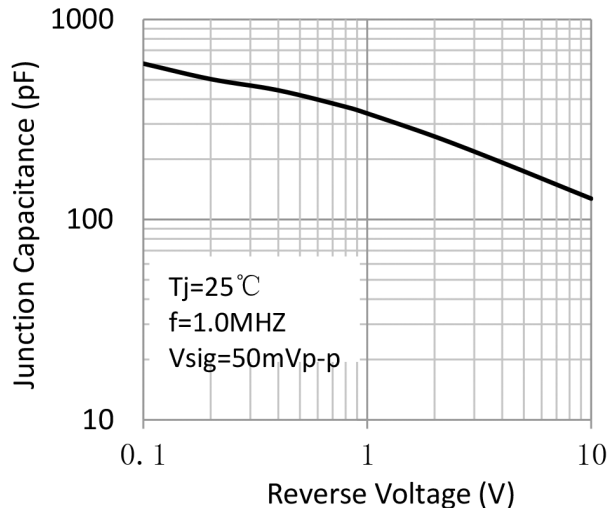
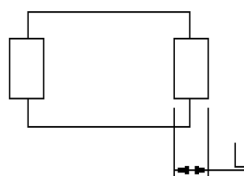
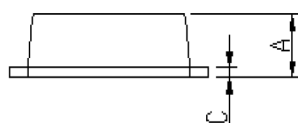
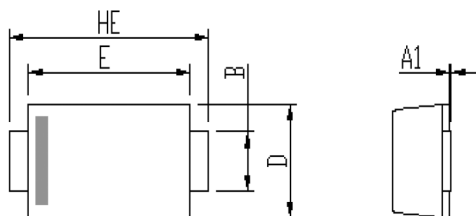


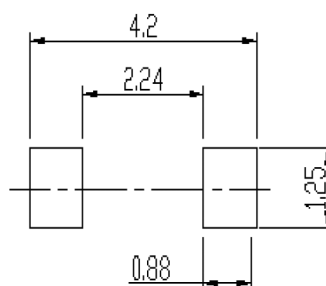
Figure 5. Typical Junction Capacitance

Package Outline Dimensions



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

