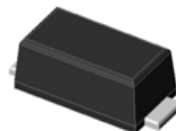


Features

- 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	FS13	FS14	FS16	FS1B	FS1B5H	FS1CH	Unit	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	60	100	150	200	V	
Maximum RMS voltage	VRMS	14	21	28	42	70	105	140	V	
Maximum DC blocking voltage	VDC	20	30	40	60	100	150	200	V	
Maximum average forward rectified current	IF(AV)	1.0							A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30.0							A	
Operating junction temperature range	TJ	- 55 to + 150					- 55 to + 175			°C
Storage temperature range	TSTG	- 55 to + 150							°C	

Electrical Characteristics (TA = 25 °C unless otherwise noted)										
Parameter	Test Conditions	Symbol	FS12	FS13	FS14	FS16	FS1B	FS1B5H	FS1CH	Unit
Maximum instantaneous forward voltage	IF=0.5A,TA=25°C	VF	0.40	0.45		0.55	0.75	0.80		Volts
	IF=1 A,TA=25°C		0.50			0.70	0.81	0.90		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	200	200		200	150	200		uA
	TA=125°C		10	30		20			mA	
Typical thermal resistance ¹⁾	junction to ambient	RθJA	90							°C/W
	junction to case	RθJC	60							
	junction to mount	RθJM	20							

Note:1),The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 5x5mm copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

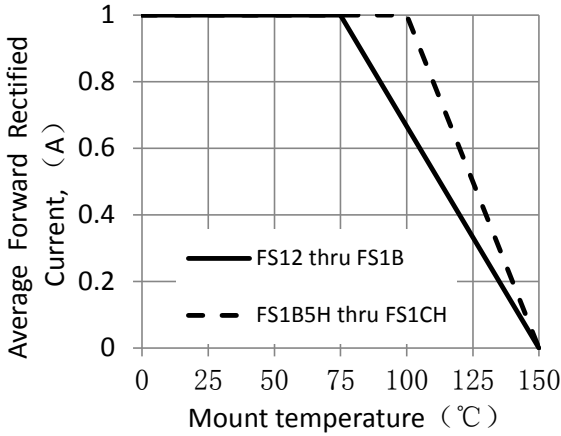


Figure 1. Forward Current Derating Curve

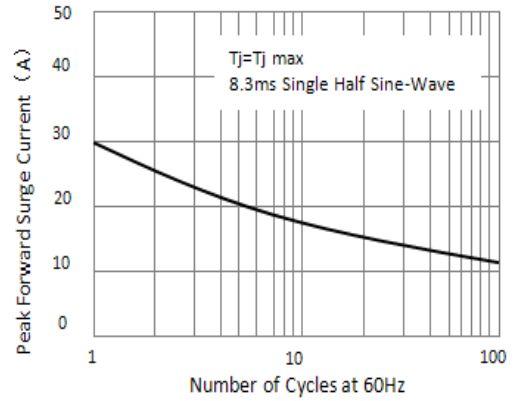


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

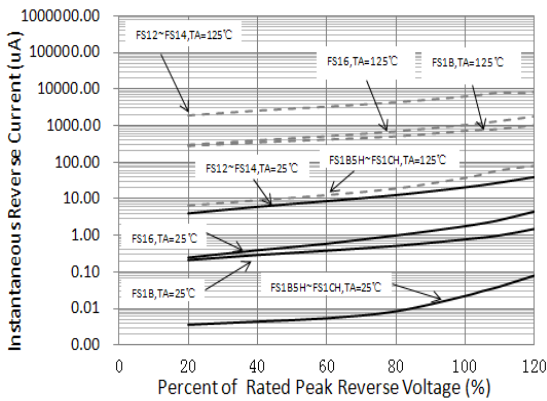


Figure 3. Typical Instantaneous Reverse Characteristics

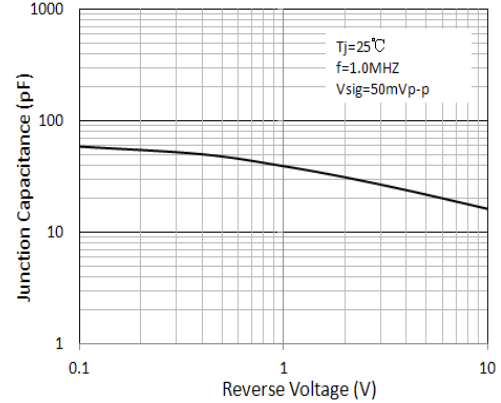


Figure 4. Typical Junction Capacitance

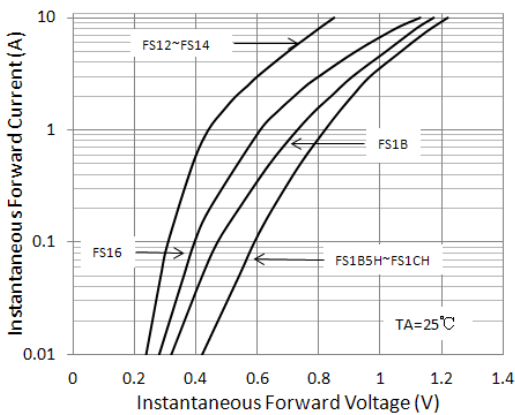
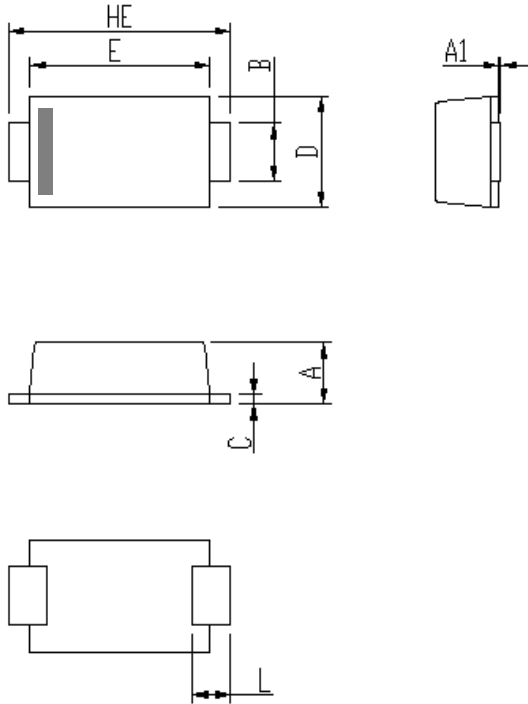


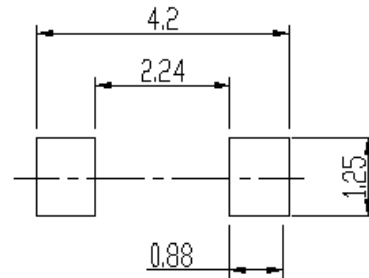
Figure 5. Typical Instantaneous Forward Characteristics

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

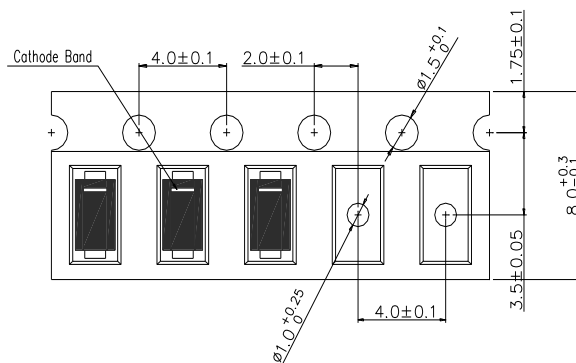


Packing Information

Packing quantities:

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

Tape & Reel Specification





FS12 thru FS1CH

Surface Mount Schottky Rectifier
Reverse Voltage 20~200V Forward Current 1A

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