

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



eSGA
(SOD-123FL)

Applications

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

Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	FS22N	FS22NS	FSL23	FSL23S	FSL24	FS24N	FSL26	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	20	30	30	40	40	60	V
Maximum RMS Voltage	V_{RMS}	14	14	21	21	28	28	42	V
Maximum DC Blocking Voltage	V_{DC}	20	20	30	30	40	40	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	50				80		50	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	FS22N	FS22NS	FSL23	FSL23S	FSL24	FS24N	FSL26	Unit
Maximum Instantaneous Forward Voltage	V_F	$I_F=1\text{A}$	0.40	0.40	0.43	0.40	0.40	0.40	0.45	V
		$I_F=2\text{A}$	0.43	0.45	0.50	0.43	0.43	0.45	0.50	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	0.5	0.5	0.5	0.5	1.0	1.0	1.0	mA
		$T_A=100^\circ\text{C}$	30	30	30	30	30	30	50	mA
Typical junction capacitance	C_J	4.0V, 1MHz	120							pF
Typical Thermal Resistance	$R_{\theta JA}$	Juntion to Ambient	100						85	$^\circ\text{C/W}$
	$R_{\theta JL}$	Juntion to Lead	20							$^\circ\text{C/W}$

Typical Electrical Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise specified)

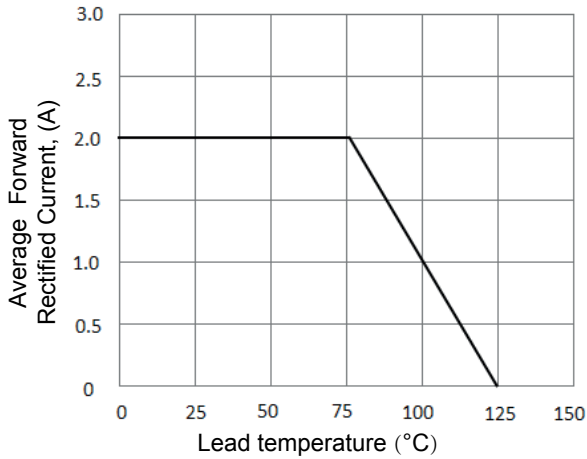


Figure 1. Forward Current Derating Curve

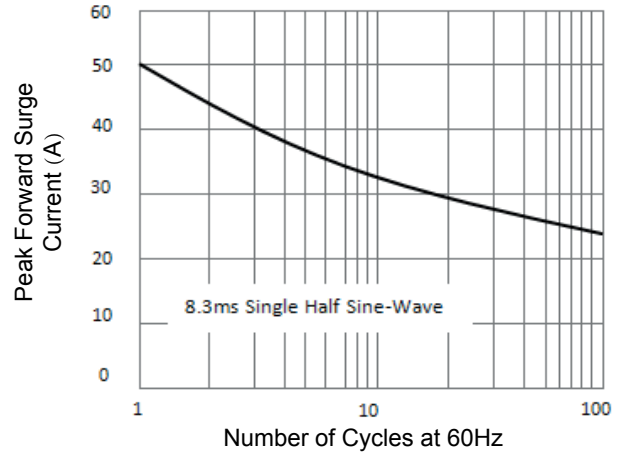


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

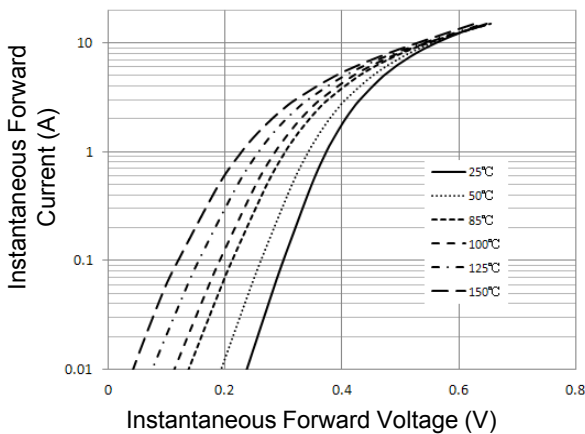


Figure 3. Typical Instantaneous Forward Characteristics (FSL23)

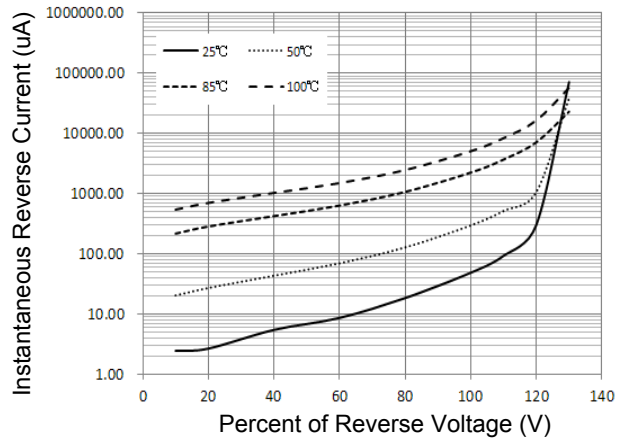


Figure 4. Typical Reverse Characteristics (FSL23)

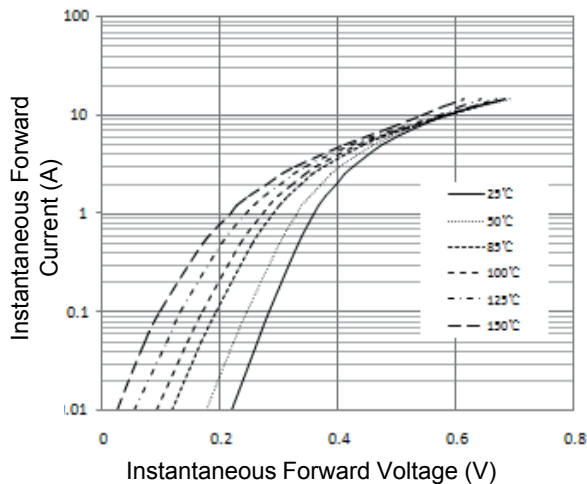


Figure 5. Typical Instantaneous Forward Characteristics (FSL24)

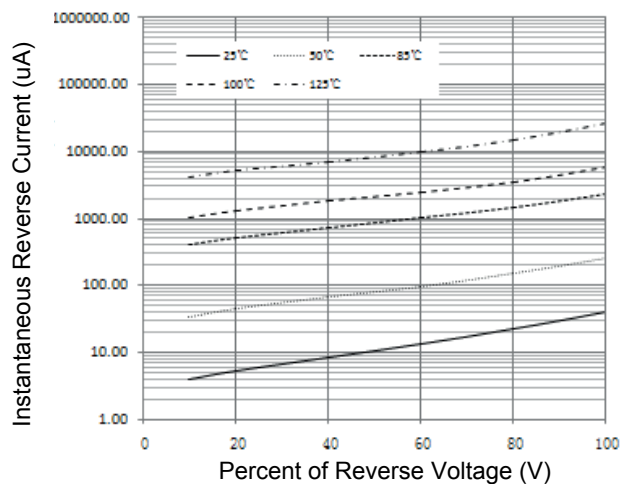


Figure 6. Typical Reverse Characteristics (FSL24)

Typical Electrical Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise specified)

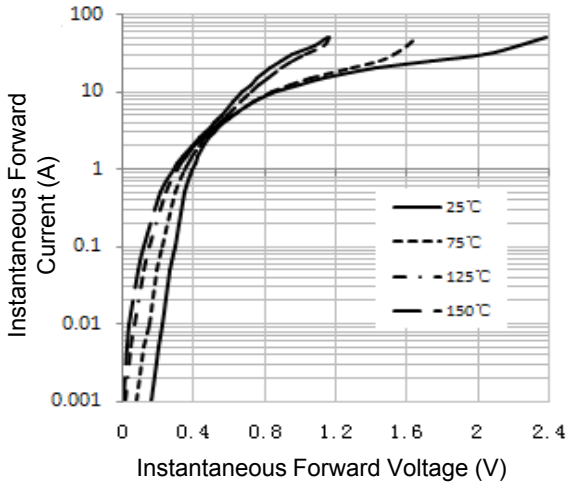


Figure 7. Typical Instantaneous Forward Characteristics (FSL26)

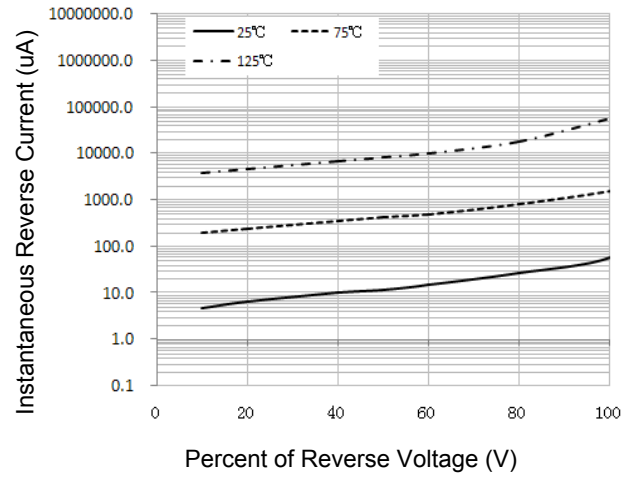


Figure 8. Typical Reverse Characteristics (FSL26)

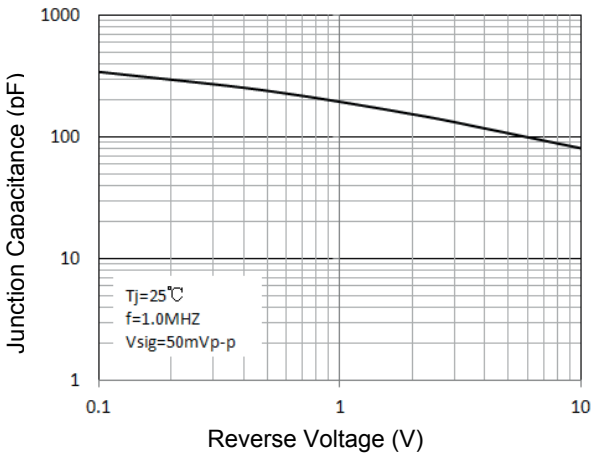
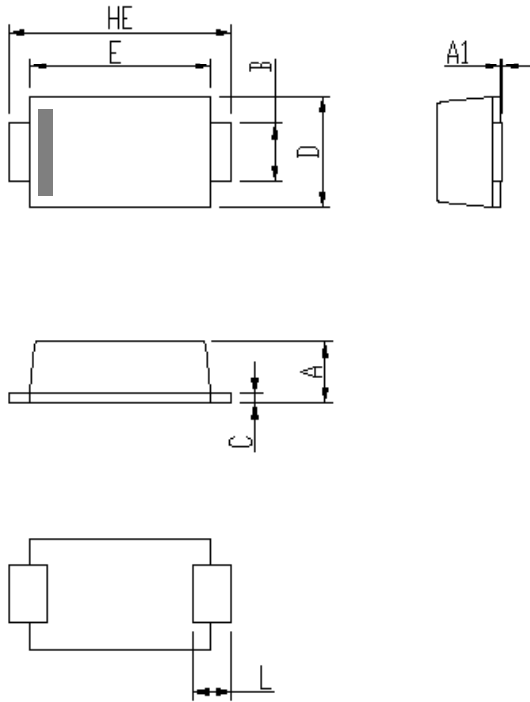


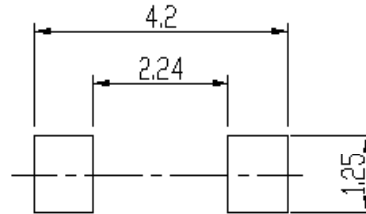
Figure 9. Typical Junction Capacitance

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

Packing Tape Specification

