

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds



Package: eSGA
(SOD-123FL)

Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams

Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Rectified Current	I _(AV)	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	25.0	A
Operation Junction Temperature Range	T _J	- 65to+ 125	°C
Storage Temperature Range	T _{STG}	- 65to+ 150	°C

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

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage	I _F =1.0A	V _F	0.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	1	mA
	T _A =100°C		10	mA
Typical Junction Capacitance	4.0V, 1MHZ	C _J	80	pF

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

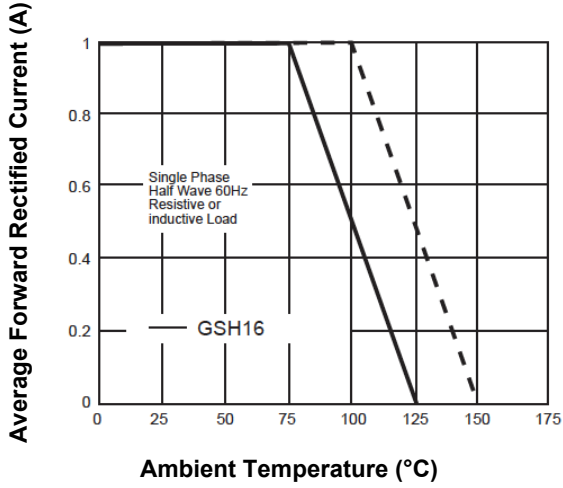


Figure 1. Forward Current Derating Curve

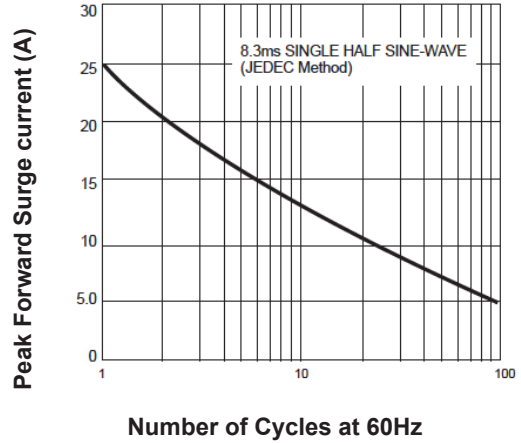


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

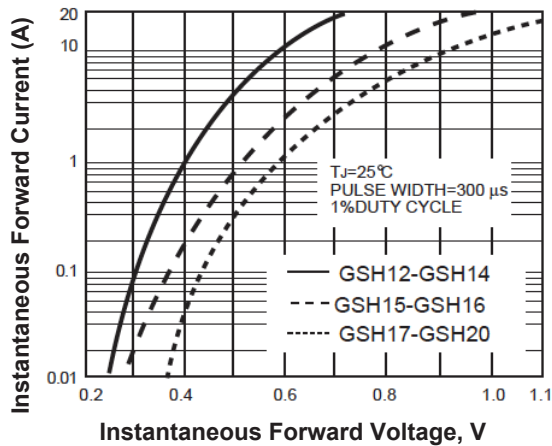


Figure 3. Typical Instantaneous Forward Characteristics

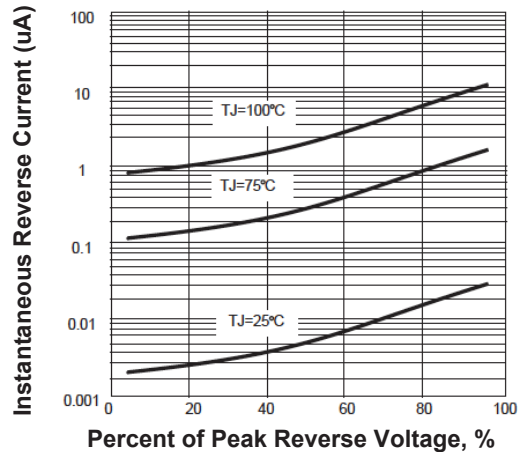


Figure 4. Typical Reverse Characteristics

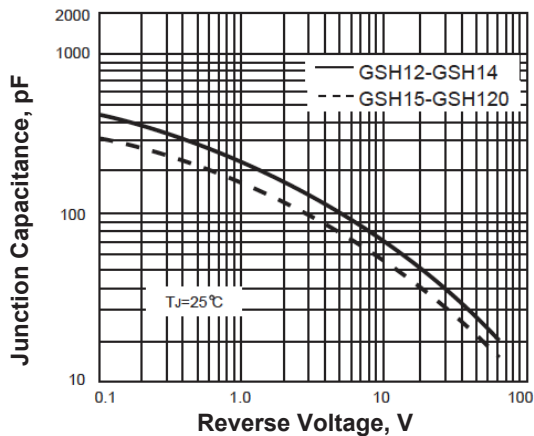
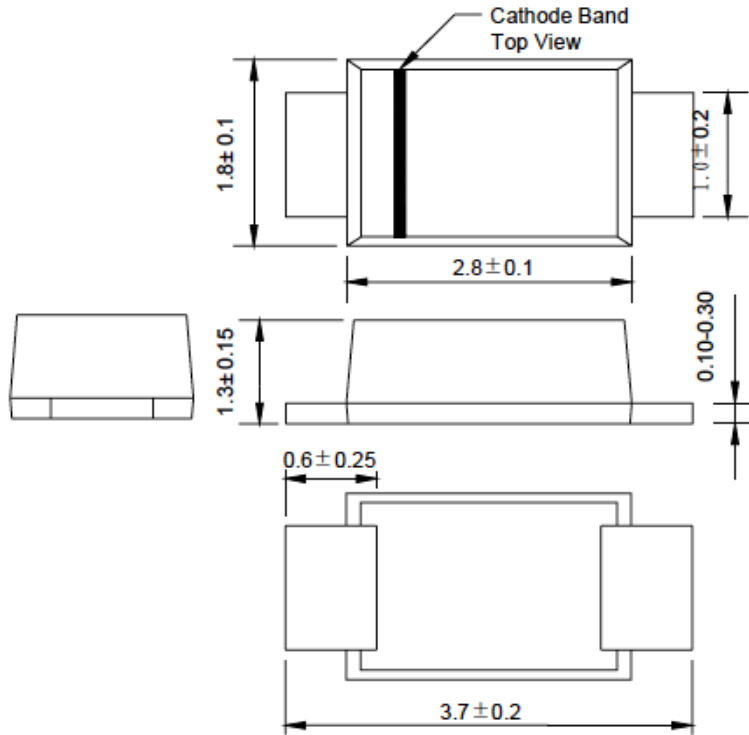


Figure 5. Typical Junction Capacitance

Package Outline Dimensions eSGA (SOD-123FL)



Unit:mm