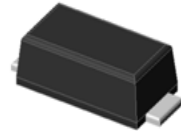


Schottky Barrier Rectifier in SOD-123FL

Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature
- Moisture sensitivity: level 1, per J-STD-020



Mechanical Data

- **Case:** SOD-123FL (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

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

Absolute Maximum Ratings							
Ratings at 25 °C, ambient temperature unless otherwise specified							
Parameter	Symbol	SS22FL	SS23FL	SS24FL	SS26FL	SS210FL	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	42	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	60	100	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}	40					A
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150					°C

Electrical Characteristics								
(T _A = 25 °C unless otherwise specified)								
Parameter	Test Conditions	Symbol	SS22FL	SS23FL	SS24FL	SS26FL	SS210FL	Unit
Maximum instantaneous forward voltage	$I_F=2A, T_A=25^{\circ}C$	V_F	0.55			0.70	0.85	V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^{\circ}C$	I_R	0.5					mA
	$T_A=125^{\circ}C$		50			10		
Typical junction capacitance	4.0 V, 1 MHz	C_J	220			180		pF

Thermal Characteristics							
Parameter	Symbol	SS22FL	SS23FL	SS24FL	SS26FL	SS210FL	Unit
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	95					°C/W
	$R_{\theta JC}$	60					
	$R_{\theta JI}$	35					

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0×5.0mm copper pads

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Figure 1. Forward Current Derating Curve

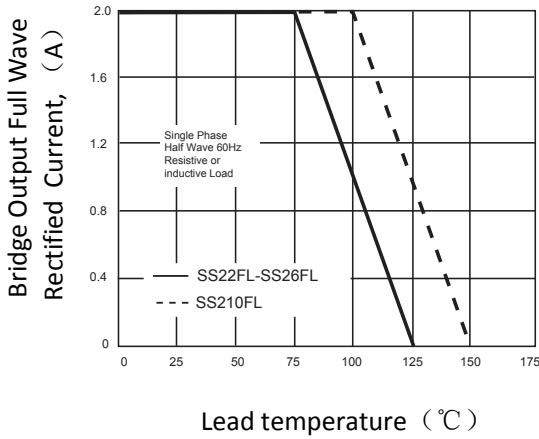


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

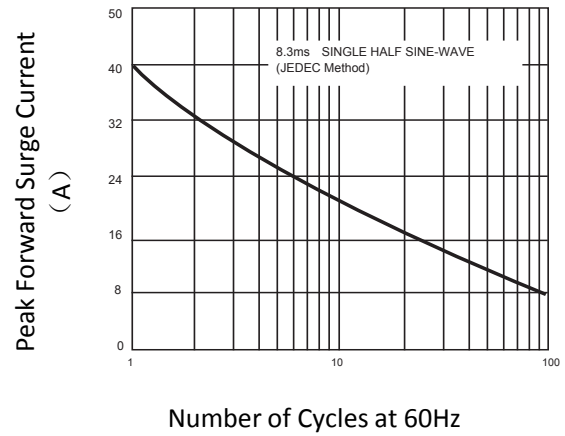


Figure 3. Typical Instantaneous Forward Characteristics

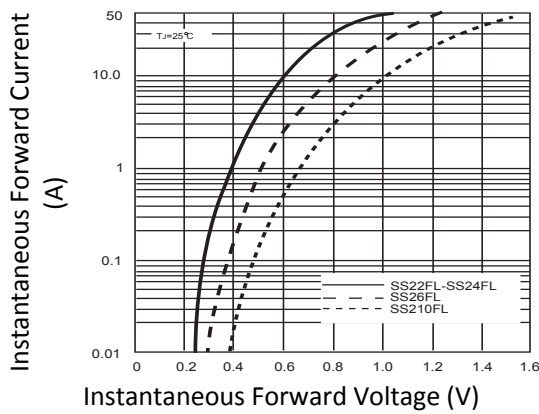


Figure 4. Typical Reverse Characteristics

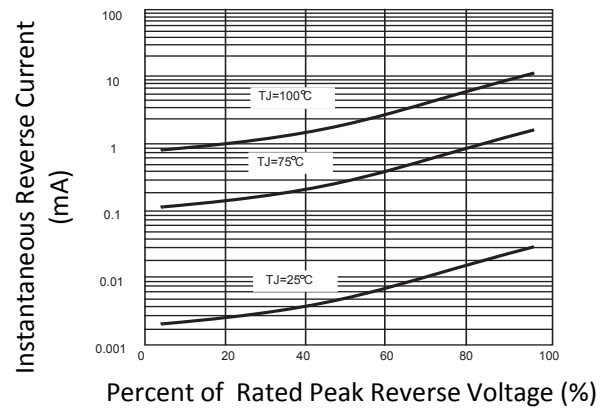
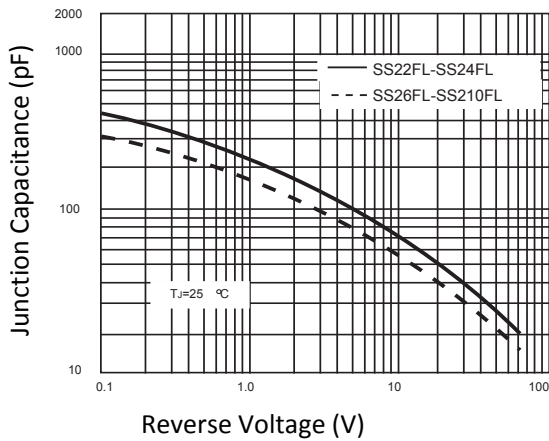
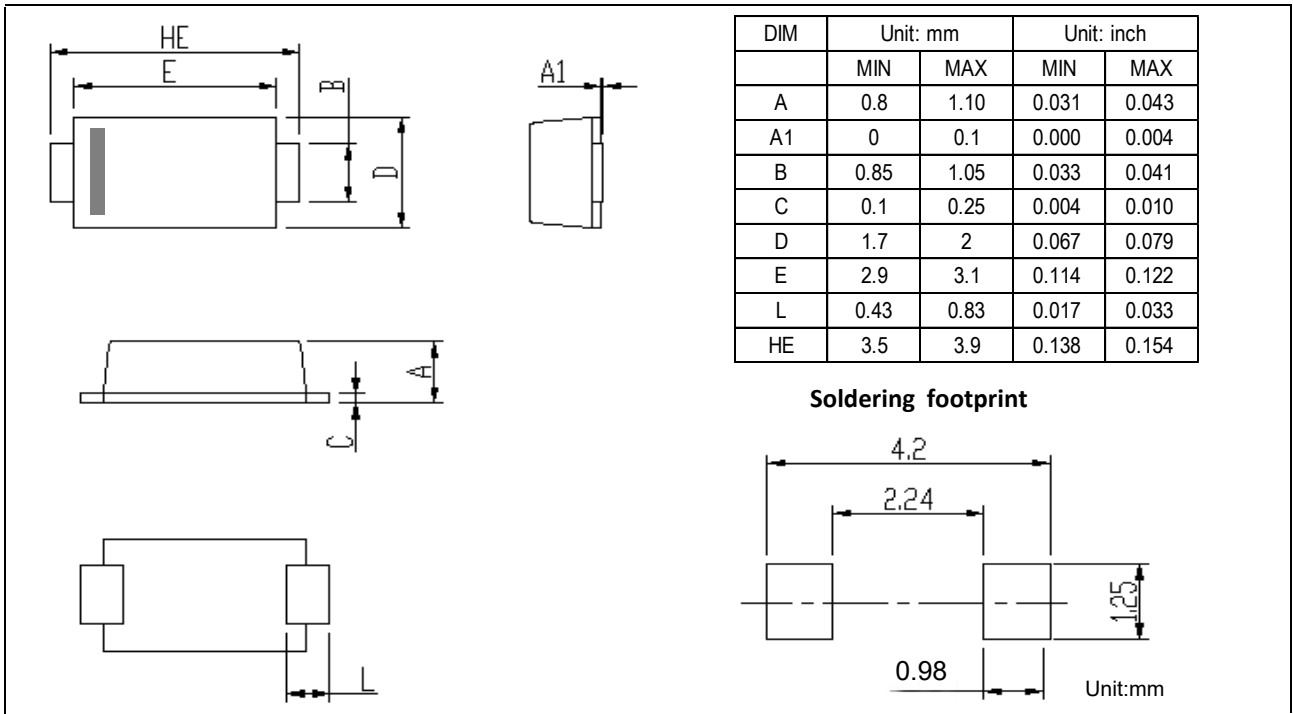


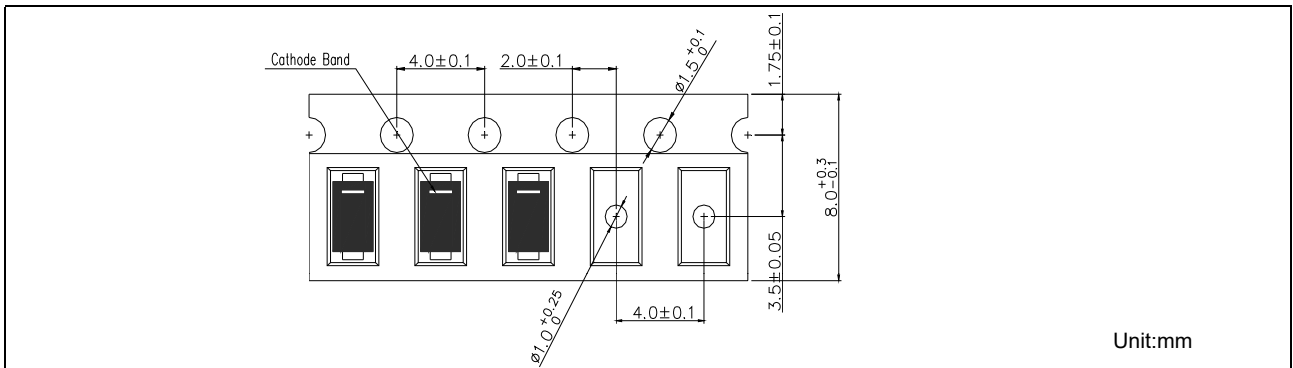
Figure 5. Typical Junction Capacitance



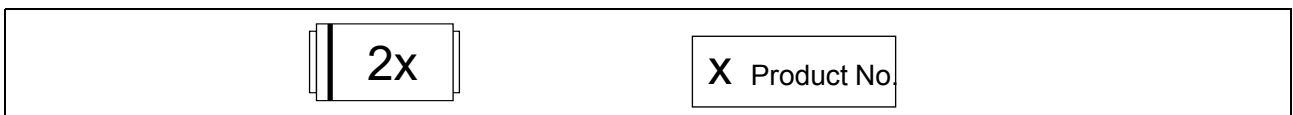
Package Dimensions



Package Information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SS22FL Thru SS210FL	SOD-123FL	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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