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S110FP
Schottky Barrier Rectifiers

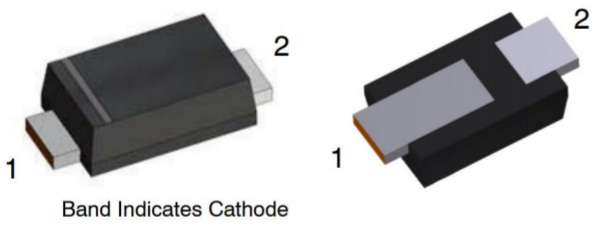
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Features

- Multilayer Metal -Silicon Potential Structure
- High Current Capability, High Efficiency
- High Junction Temperature Capability
- Low Leakage Current
- RoHs Product

Applications

- surface mount schottky barrier rectifier
- Buck and Boost dc−dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit



SOD-123HE



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	100	V
Maximum RMS voltage	V_{RMS}	70	V
Forward Current (DC)	I_F	1.0	A
Forward Surge Current (60 Hz @ 1 cycle)	I_{FSM}	25	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance per leg @TA = 25°C	RθJA	85	°C/W
Operating Junction Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	T_{STG}	−55 to +150	°C
Mounted onto a 4 in square FR−4 board 10 mm sq. 1 oz. Cu 0.06” thick single sided. Operating to steady state.			

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF*	--	--	0.7	V	IF=0.1A
		--	--	0.85	V	IF=1A
Reverse Leakage	I_R**	--	--	0.5	mA	TA=25°C
		--	--	20	mA	TA=100°C
Total Capacitance	C_T	--	80	--	pF	VR = 5.0 V, f = 1 MHz
*Pulse width ≤380 uS, Duty cycle < 2%; **pulse test ， tp≤5ms						

Typical Electrical Characteristic Curves

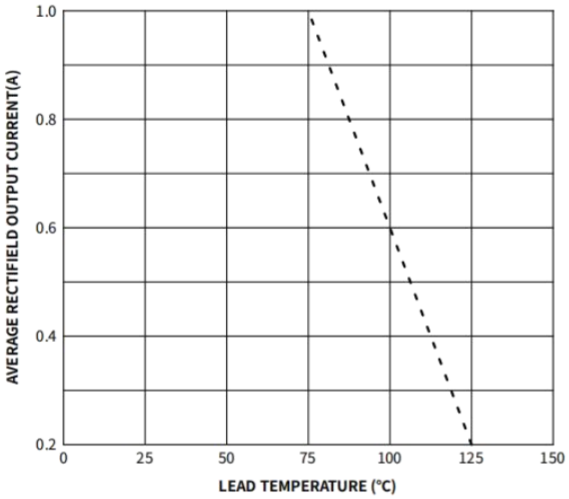


Fig.1 Forward Current Derating Curve

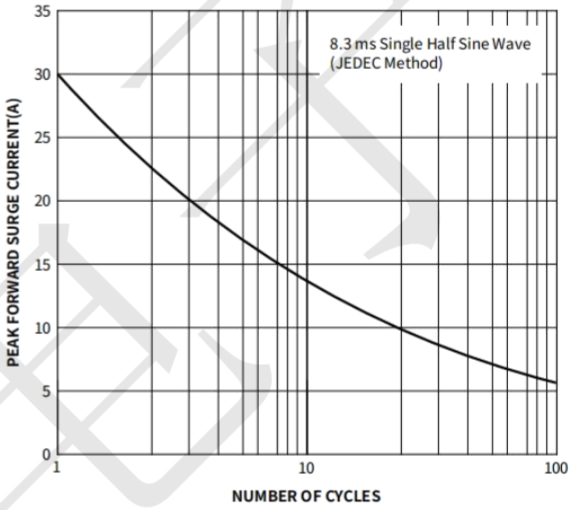


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

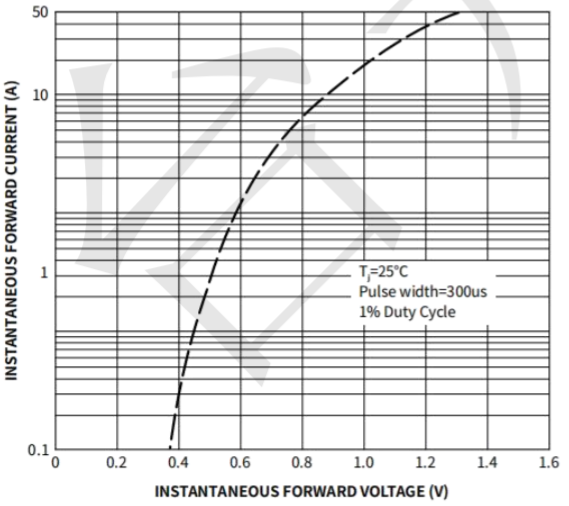


Fig.3 Typical Forward Voltage

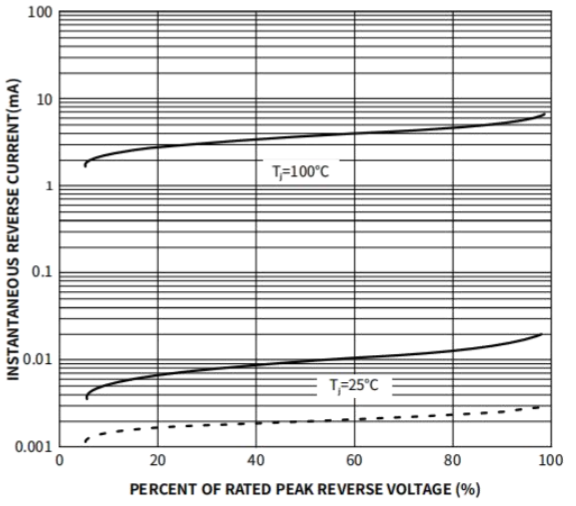
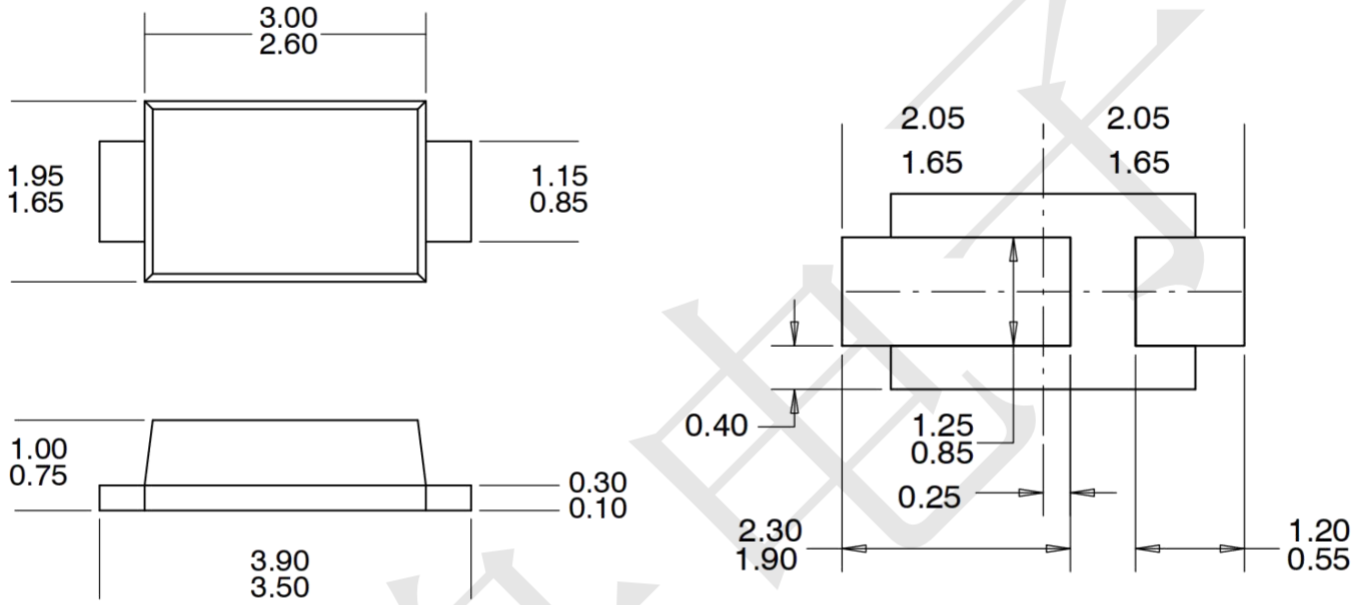


Fig.4 Typical Reverse Characteristics

Package Outline Dimensions (unit: mm)

SOD-123HE



Mounting Pad Layout (unit: mm)

