

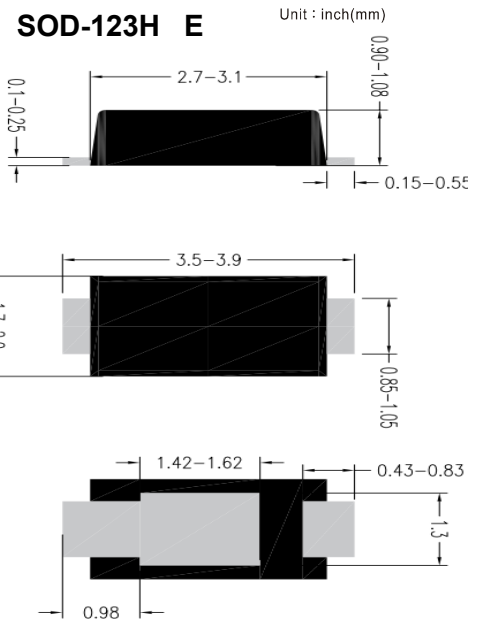
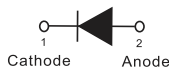
Surface Mount Schottky Rectifier

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Data

- Package: SOD-123HE
- Terminals: Tin plated leads, solderable per
- Polarity: Cathode line denotes the cathode end



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

Parameter	Symbol	Unit	SS12HE	SS13HE	SS14HE	SS15HE	SS16HE	SS18HE	SS110HE	SS115HE	SS120HE
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, T_a (FIG.1)	I_O	A	1.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$	I_{FSM}	A	30								
Storage temperature	T_{stg}	$^\circ\text{C}$	-55 ~ +150								
Junction temperature	T_j	$^\circ\text{C}$	-55 ~ +150					-55 ~ +175			

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

Parameter	Symbol	Unit	Test Conditions	SS12HE	SS13HE	SS14HE	S1S5HE	SS16HE	SS18HE	SS110HE	SS115HE	SS120HE
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM}	I _{RRM}	mA	T _a =25℃	0.50					0.10			
			T _a =100℃	10					5			



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

Parameter	Symbol	Unit	SS12HE	SS13HE	SS14HE	SS15HE	SS16HE	SS18HE	SS110HE	SS115HE	SS120HE
Thermal Resistance	RθJ-A	°C/W	70 ¹⁾								
	RθJ-L		20 ¹⁾								

Note:

(1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

Characteristics (Typical)

FIG1: I_o -TLCurve

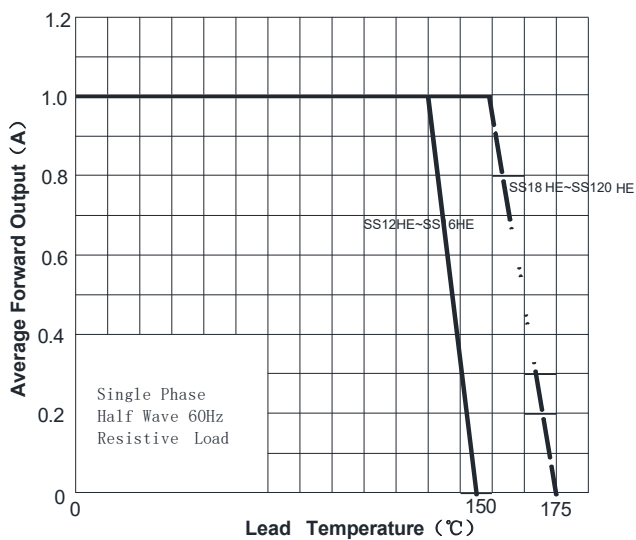


FIG2: Surge Forward Current Capability

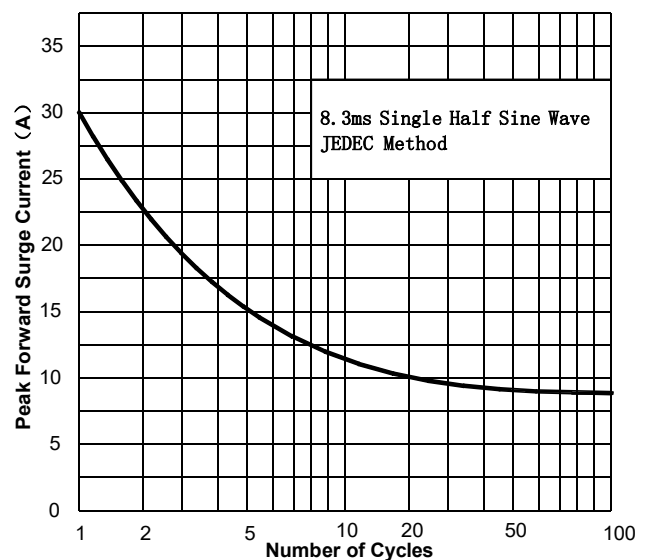


FIG3: Forward Voltage

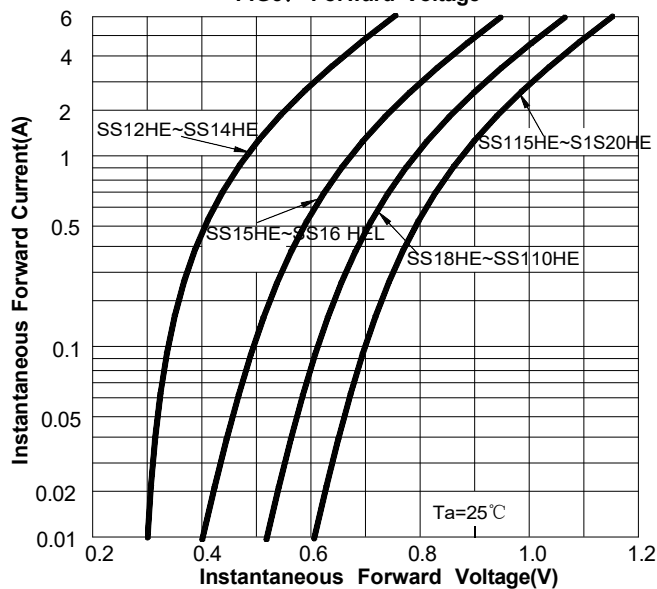


FIG4: Typical Reverse Characteristics

