

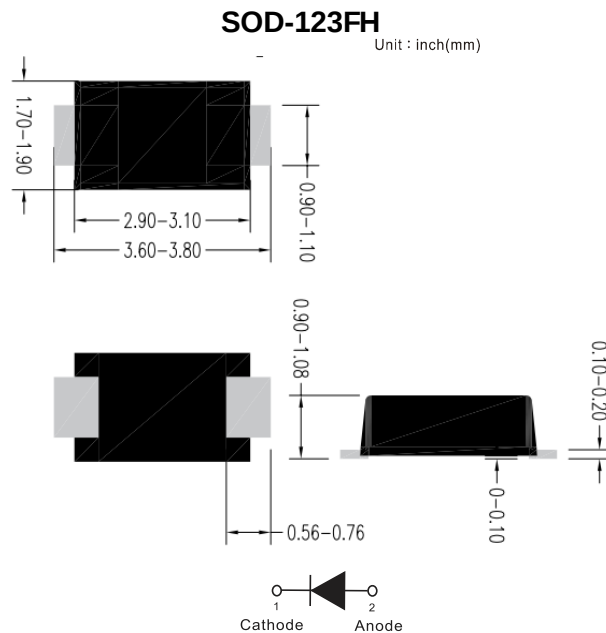
Surface Mount Schottky Barrier Diode

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-123FH
- 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	SS12FH	SS13FH	SS14FH	SS15FH	SS16FH	SS18FH	SS110FH	SS115FH	SS120FH
Repetitive peak reverse voltage	VRRM	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, T_a (FIG.1)	IO	A	1.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	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	SS12FH	SS13FH	SS14FH	SS15FH	SS16FH	SS18FH	SS110FH	SS115FH	SS120FH
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	IRRM	mA	Ta=25°C	0.50					0.10			
			Ta=100°C	10					5			



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

Parameter	Symbol	Unit	SS12FH	SS13FH	SS14FH	SS15FH	SS16FH	SS18FH	SS110FH	SS115FH	SS120FH
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C}/\text{W}$	70 ⁽¹⁾								
	$R_{\theta J-L}$		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 - T_L Curve

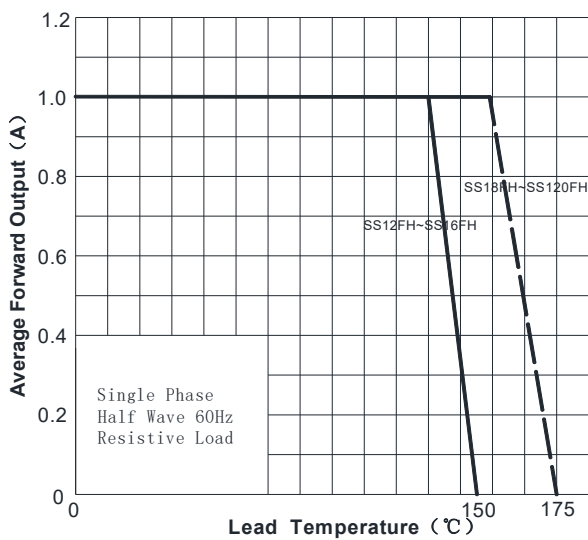


FIG2: Surge Forward Current Capability

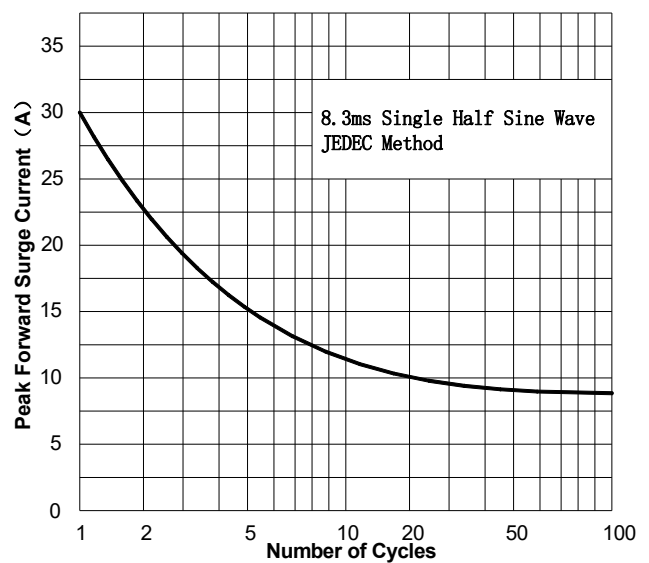


FIG3: Forward Voltage

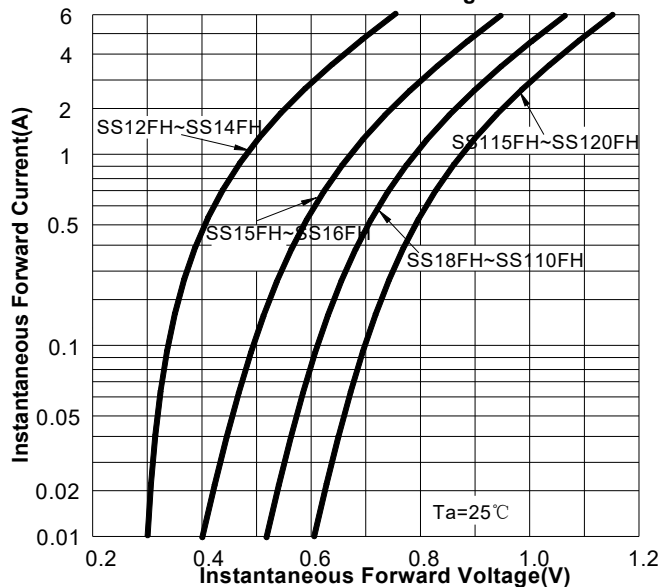


FIG4: Typical Reverse Characteristics

