

Surface Mount Schottky Barrier Diode

Features

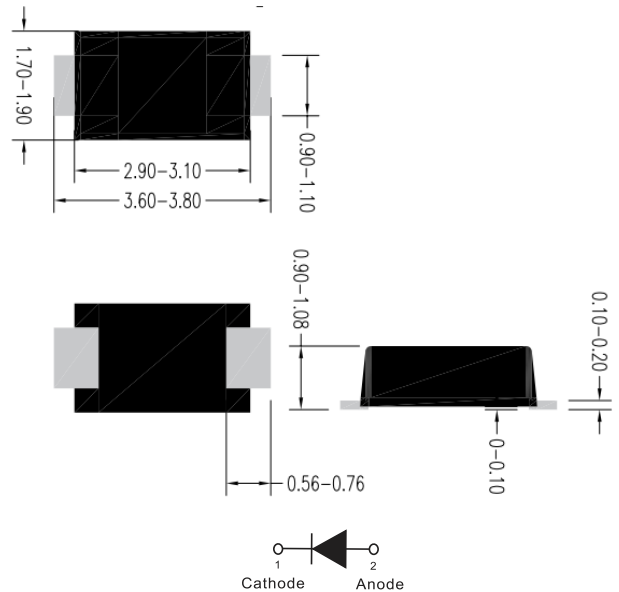
- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Data

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

SOD-123FH

Unit : inch(mm)



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

Parameter	Symbol	Unit	SS32FH	SS33FH	SS34FH	SS35FH	SS36FH	SS38FH	SS310FH	SS315FH	SS320FH
Repetitive peak reverse voltage	VRRM	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, Ta (FIG.1)	IO	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Tj=25℃	IFSM	A	65								
Storage temperature	Tstg	℃	-55 ~+150								
Junction temperature	Tj	℃	-55 ~+150					-55 ~+175			
Typical Junction Capacitance measured at 1MHz and Applied on 4.0VD.C	Cj	pF	165								

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

Parameter	Symbol	Unit	Test Conditions	SS32FH	SS33FH	SS34FH	SS35FH	SS36FH	SS38FH	SS310FH	SS315FH	SS320FH
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	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°C	0.5					0.1			
			T _a =100°C	10					5			



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

Parameter	Symbol	Unit	SS32FH	SS33FH	SS34FH	SS35FH	SS36FH	SS38FH	SS310FH	SS315FH	SS320FH
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	70 ¹⁾								
	$R_{\theta J-L}$		25 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:Io-TL Curve

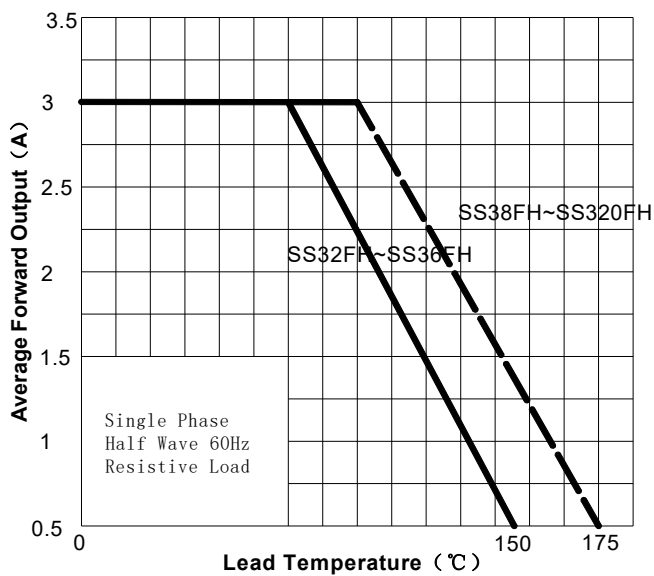


FIG2: Surge Forward Current Capability

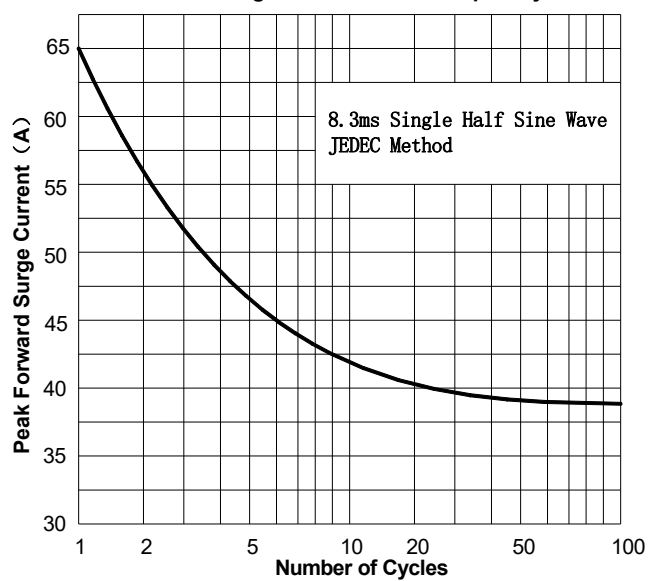


FIG3: Forward Voltage

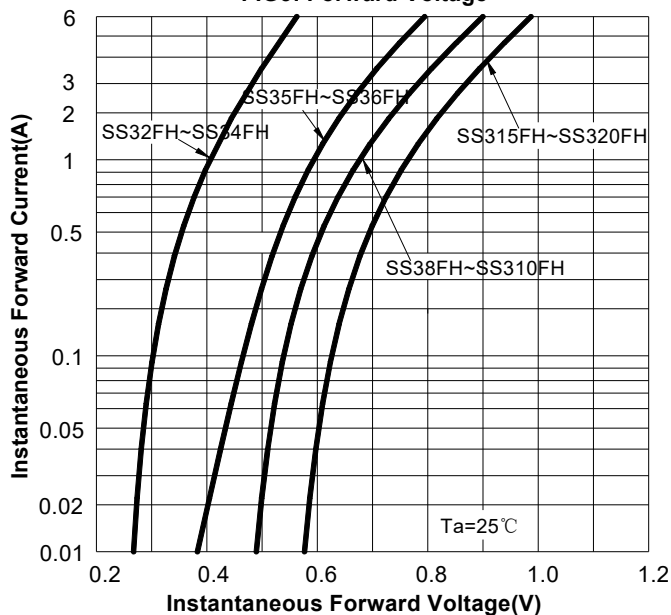


FIG4: Typical Reverse Characteristics

