

Surface Mount Schottky Barrier Diode

Features

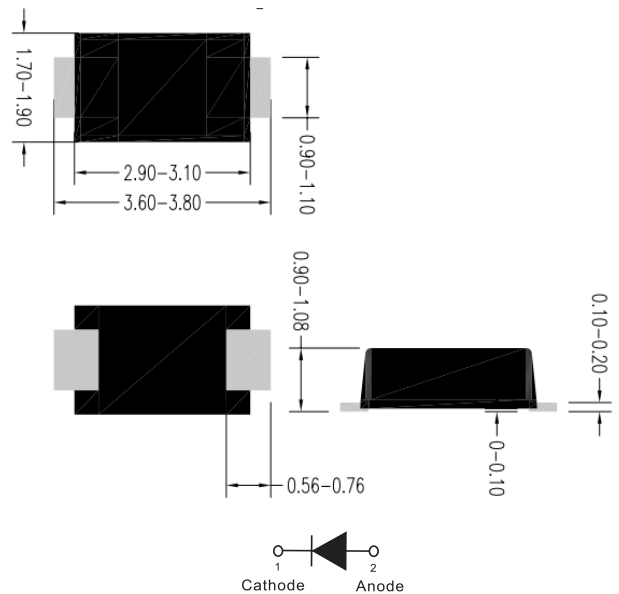
- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- AEC-Q101 qualified
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Date

- 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	SS32 FHQ	SS33 FHQ	SS34 FHQ	SS35 FHQ	SS36 FHQ	SS38 FHQ	SS310 FHQ	SS315 FHQ	SS320 FHQ
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	SS32 FHQ	SS33 FHQ	SS34 FHQ	SS35 FHQ	SS36 FHQ	SS38 FHQ	SS310 FHQ	SS315 FHQ	SS320 FHQ
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=3.0A	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	0.5					0.1			
			Ta=100°C	10					5			



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

Parameter	Symbol	Unit	SS32 FHQ	SS33 FHQ	SS34 FHQ	SS35 FHQ	SS36 FHQ	SS38 FHQ	SS310 FHQ	SS315 FHQ	SS320 FHQ
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

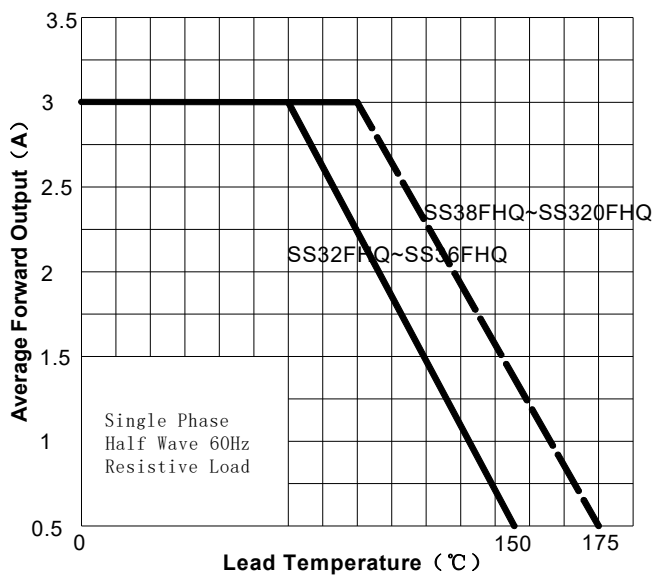


FIG2: Surge Forward Current Capability

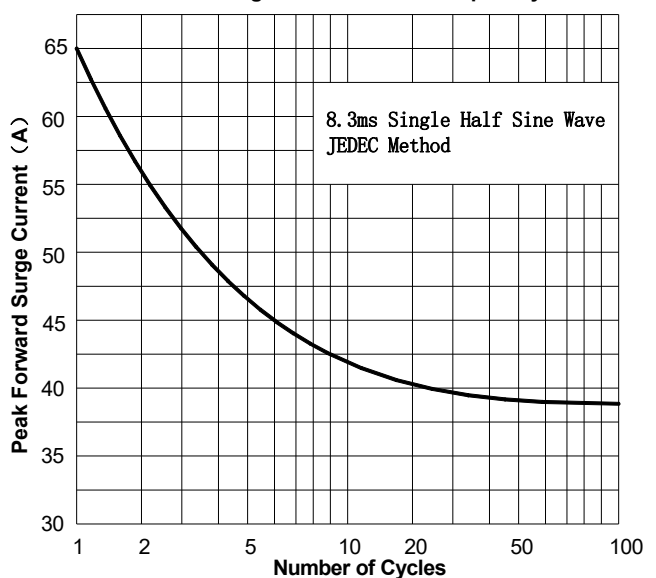


FIG3: Forward Voltage

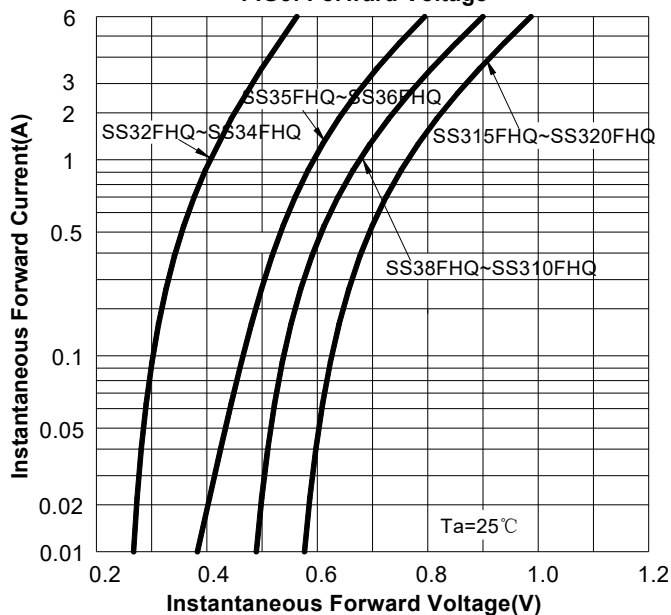


FIG4: Typical Reverse Characteristics

