

■ Features

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

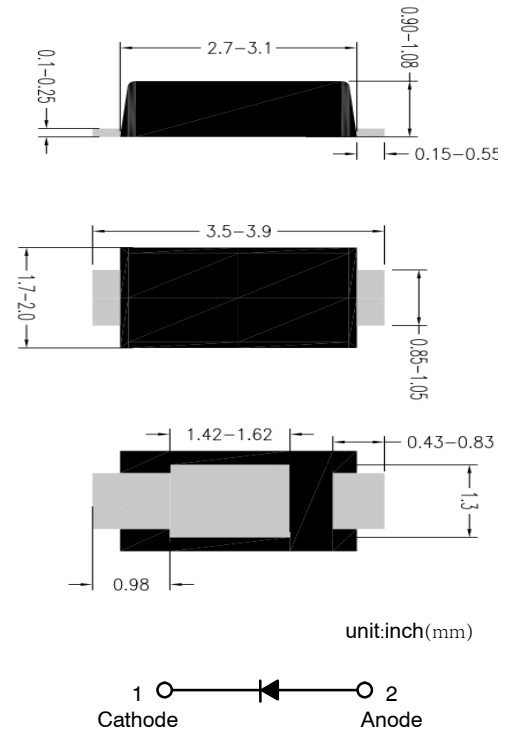
■ MECHANICAL DATA

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

■ APPLICATIONS

- DC/DC converters
- Freewheeling
- low voltage high frequency inverters
- polarity protection applications

SOD-123HE



■ Maximum Ratings (Ta=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32HE	SS33HE	SS34HE	SS35HE	SS36HE	SS38HE	SS310HE	SS315HE	SS320HE	
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°C	IFSM	A	65									
Storage temperature	Tstg	°C	-55 ~+150									
Junction temperature	Tj	°C	-55 ~+1					-55 ~+17				
Typical Junction Capacitance measured at 1MHz and Applied on 4.0VD.C	Cj	pF	165									

■ Electrical Characteristics (Ta=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS32HE	SS33HE	SS34HE	SS35HE	SS36HE	SS38HE	SS310HE	SS315HE	SS320HE
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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32HE	SS33HE	SS34HE	SS35HE	SS36HE	SS38HE	SS310HE	SS315HE	SS320HE
Thermal Resistance	R θ J-A	°C/W	70 ¹⁾								
	R θ 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: I_o-T_L Curve

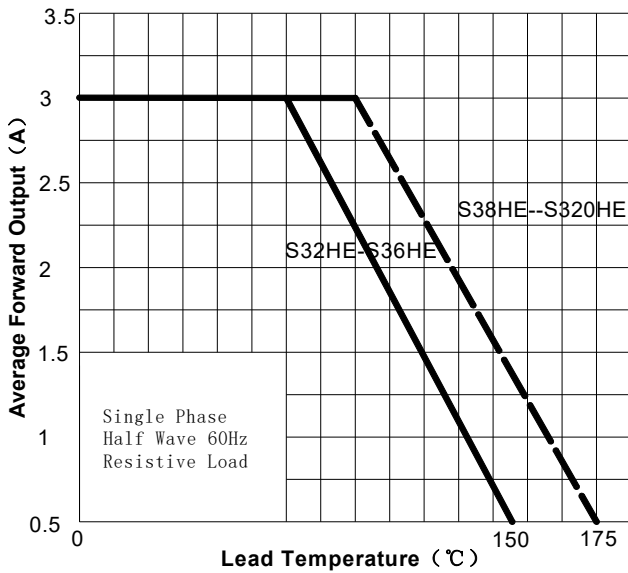


FIG2: Surge Forward Current Capability

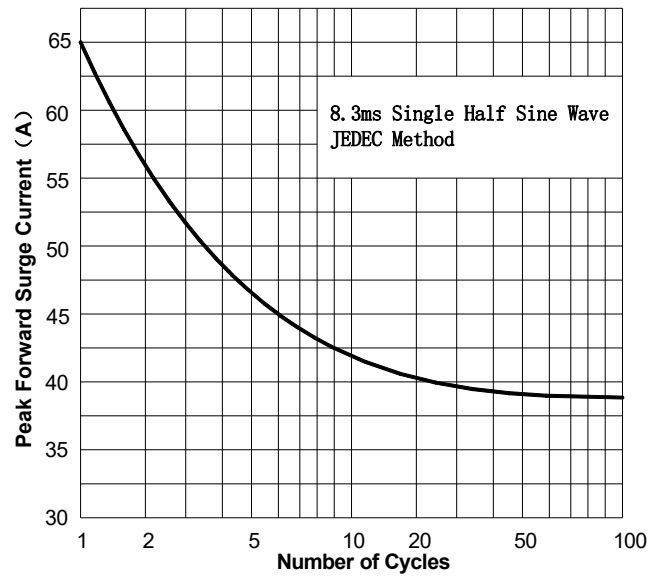


FIG3: Forward Voltage

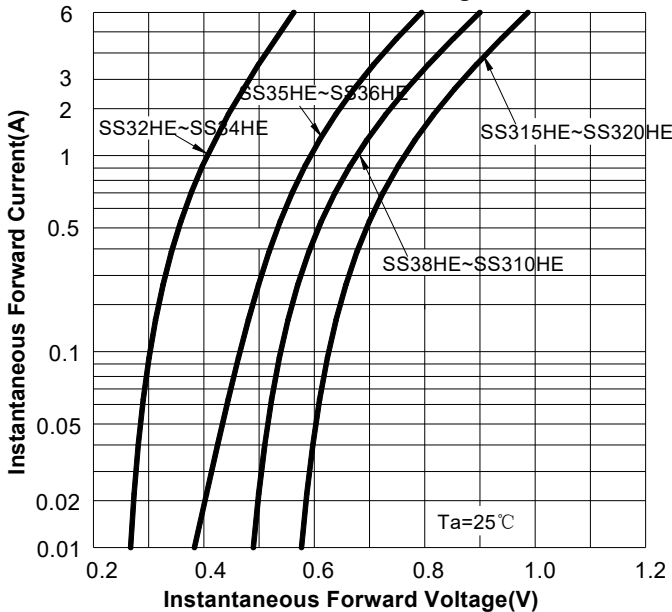


FIG4: Typical Reverse Characteristics

