



■ 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

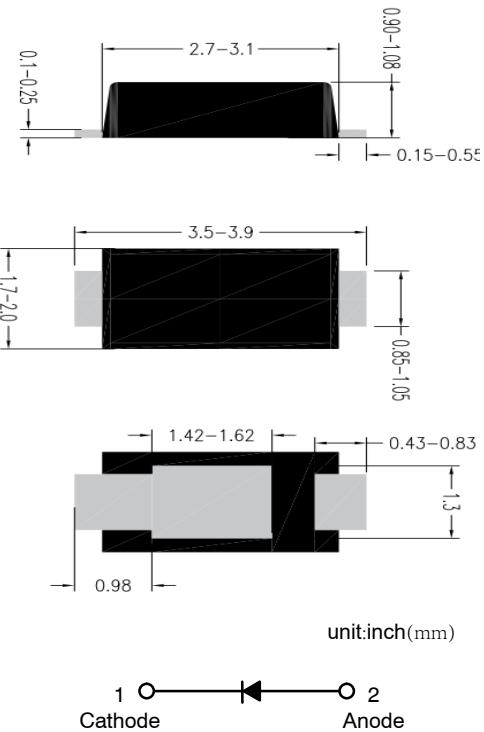
■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS22HE	SS23HE	SS24HE	SS25HE	SS26HE	SS28HE	SS210HE	SS215HE	SS220HE
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, Ta (FIG.1)	I _O	A						2.0			
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A						40			
Storage temperature	T _{stg}	°C						-55 ~+150			
Junction temperature	T _j	°C					-55 ~+1			-55 ~+17	

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS22HE	SS23HE	SS24HE	SS25HE	SS26HE	SS28HE	SS210HE	SS215HE	SS220HE
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	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		0.50				0.10			
			T _a =100°C		10				5			

SOD-123HE





Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS22HE	SS23HE	SS24HE	SS25HE	SS26HE	SS28HE	SS210HE	SS215HE	SS220HE
Thermal Resistance	R _{θJ-A}	°C/W							70 ¹⁾		
	R _{θJ-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:Io-TL Curve

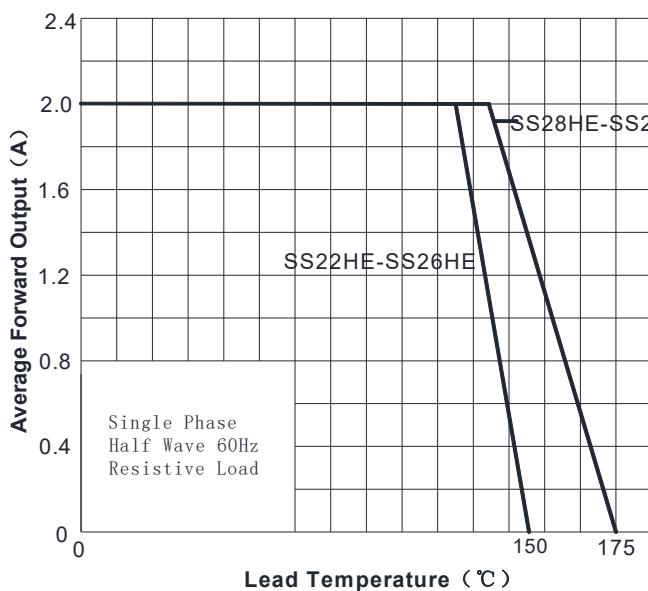


FIG2: Surge Forward Current Capability

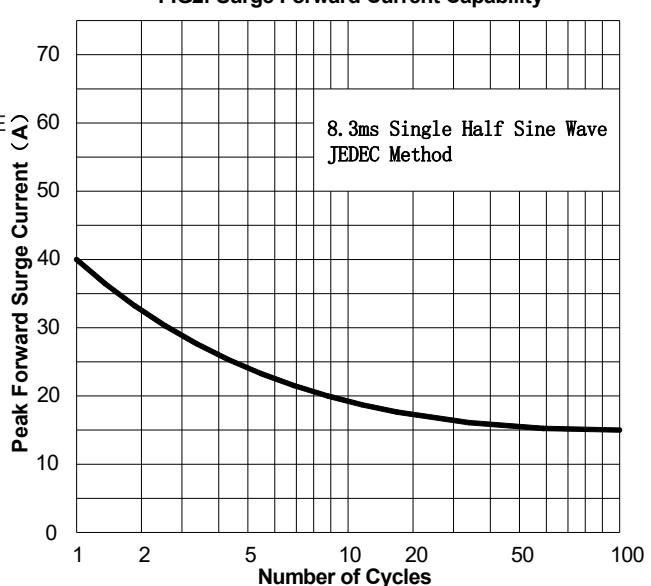


FIG3: Forward Voltage

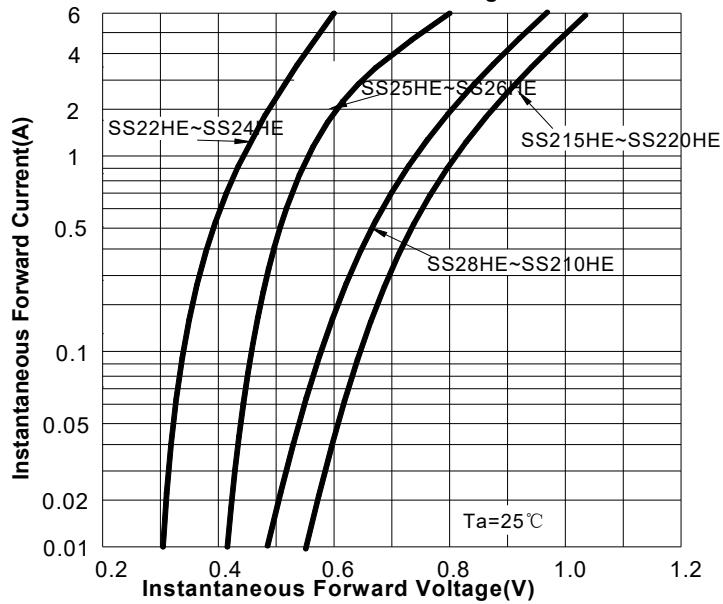


FIG4: Typical Reverse Characteristics

