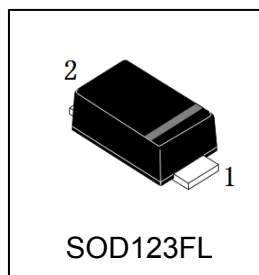


Reverse Voltage 50 to 1000V Forward Current 1.0A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * High temperature metallurgically bonded construction
- * Cavity-free glass passivated junction
- * Capable of meeting environmental standards of MIL-S-19500
- * Typical IR less than 1.0 μ A
- * High temperature soldering guaranteed: 260°C/10 seconds



Mechanical Data

Case: JEDEC SOD123-FL/MINI SMA, molded plastic over glass DIE

Terminals: Tin Plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0155 g

Handling precaution: None

We declare that the material of product is Halogen free (green epoxy compound)

Electrical Characteristic

1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SODHE 101-SH	SODHE 102-SH	SODHE 103-SH	SODHE 104-SH	SODHE 105-SH	SODHE 106-SH	SODHE 107-SH	SODHE 108-SH	Unit
Device marking code		HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current lead length at T _C = 75°C(Note 2)	I _{F(AV)}	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								A
Typical reverse recovery time (Note 1)	trr	50					75			ns
Typical thermal resistance (Note 2)	R _{θJA}	170								°C/W
	R _{θJL}	40								
Operating junction temperature range	T _J	-55 to +150								°C
storage temperature range	T _{STG}	-55 to +150								°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SODHE 101-SH	SODHE 102-SH	SODHE 103-SH	SODHE 104-SH	SODHE 105-SH	SODHE 106-SH	SODHE 107-SH	SODHE 108-SH	Unit
Maximum instantaneous forward voltage at 1.0A	V _F	1.0			1.25		1.7			V
Maximum DC reverse current at rated DC blocking voltage T _A = 25°C T _J = 100°C	I _R				5.0 100					μA
Typical junction capacitance at 4.0V, 1MHz (Note 2)	C _J				15.0					PF

NOTES:

1. $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$
2. 8.0mm^2 (.013mm thick) land areas

2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

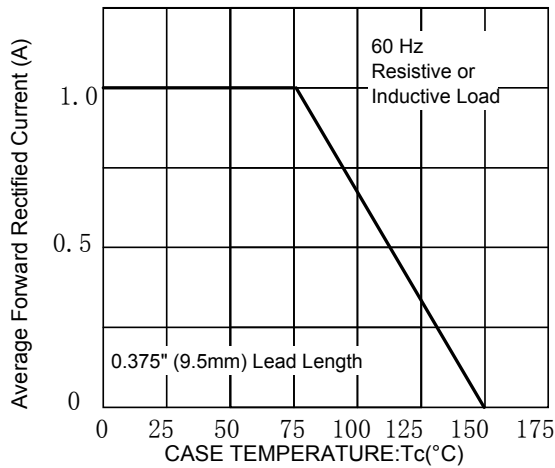


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

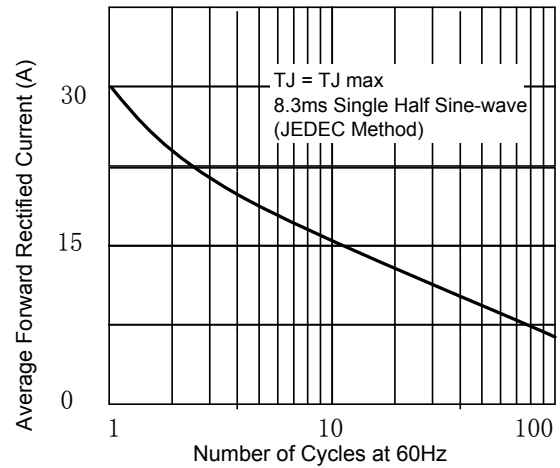


Fig. 3 – Typical Instantaneous Forward Characteristics

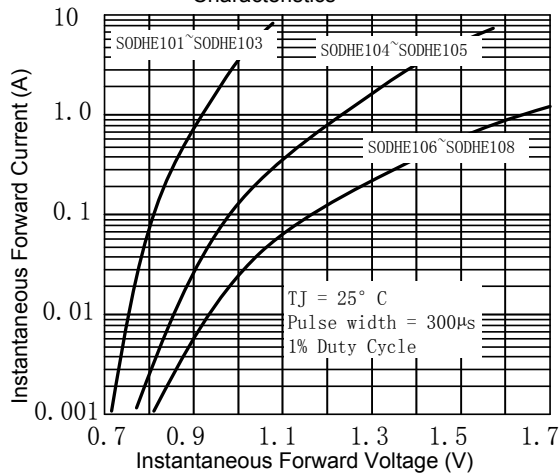


Fig. 4 – Typical Reverse Characteristics

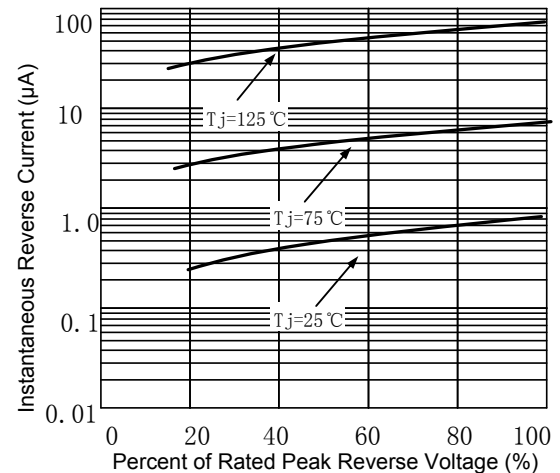


Fig 5. - typical transient thermal impedance

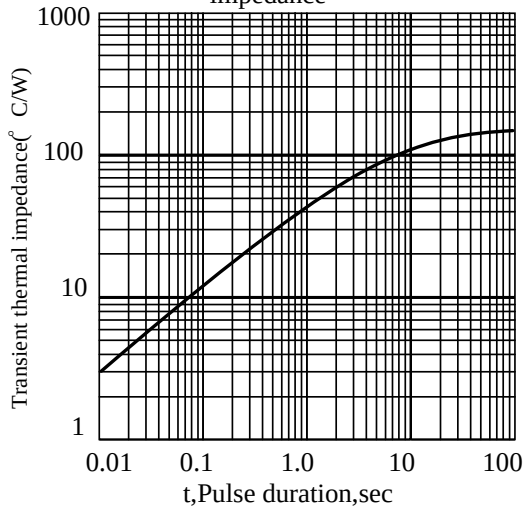
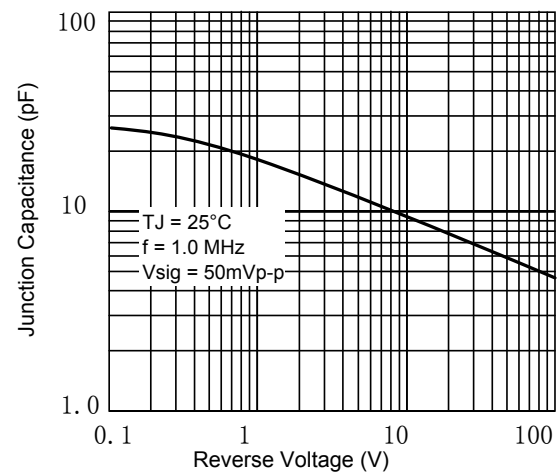
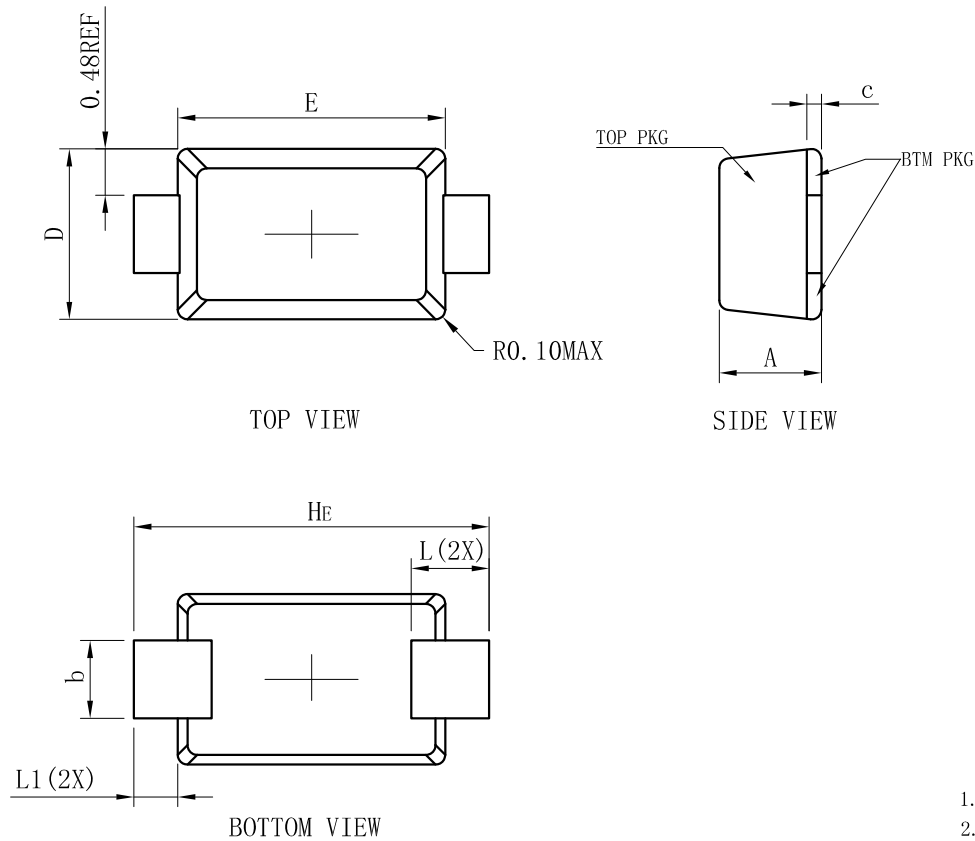


Fig 6. – Typical Junction Capacitance



3.OUTLINE AND DIMENSIONS

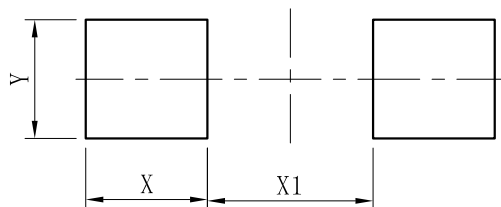


SOD123FL			
DIM	MIN	NOR	MAX
A	0.90	1.05	1.15
b	0.75	0.80	0.95
L	0.80REF.		
E	2.60	2.75	2.90
D	1.60	1.75	1.90
HE	3.50	3.65	3.80
c	0.12	0.17	0.22
L1	0.45REF.		
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish $Ra0.4 \pm 0.2\mu m$
2. Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
3. Side package surface finish $Ra0.4 \pm 0.2\mu m$

4.SOLDERING FOOTPRINT



DIM	(mm)
X	1.20
Y	1.10
X1	2.00