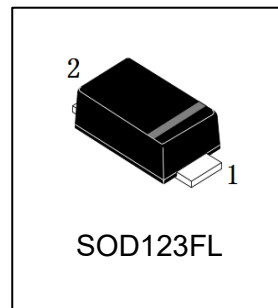


# S-SOD4007T-SH

Surface Mount Glass Passivated Junction Rectifiers  
Voltage 1000V Forward Current 1.0A

## 1. 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.
- 1.0 A operation at TA=75°C with no thermal runaway
- Typical IR less than 1.0μA.
- High temperature soldering guaranteed:260°C/10 seconds.
- We declare that the material of product complies with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



## 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
S-SOD4007T-SH	A7T	3000/Tape&Reel

## 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified current lead length at TC = 75°C(Note 1)	IF(AV)	1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	A
Reverse surger current(20mS)	IRSM	18	mA
Maximum reverse recovery time (Note 1)	trr	2100	ns
Typical thermal resistance (Note 2)	RθJA	170	°C/W
	RθJL	40	
Operating junction temperature range	TJ	-55 ~ +150	°C
Storage temperature range	TSTG	-55 ~ +150	°C

**4. ELECTRICAL CHARACTERISTICS (Ta= 25°C )**

Characteristic	Symbol	Min	Typ.	Max	Unit
Maximum instantaneous forward voltage at 1.0A	VF	-	-	1.1	V
Maximum DC reverse current TJ= 25°C	IR	-	-	5	μA
at rated DC blocking voltage TJ = 125°C		-	-	50	
Typical junction capacitance at 4.0V, 1MHz	CJ	-	15	-	pF

1. IF = 0.5A, IR = 1.0A, IRR = 0.25A

2. 8.0mm<sup>2</sup> (.013mm thick) land areas

## 5.ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

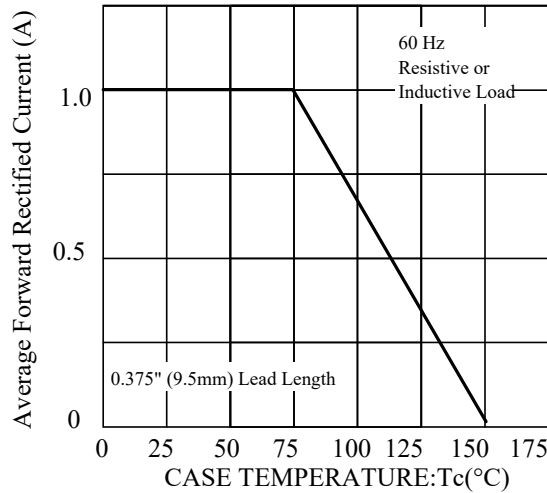


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

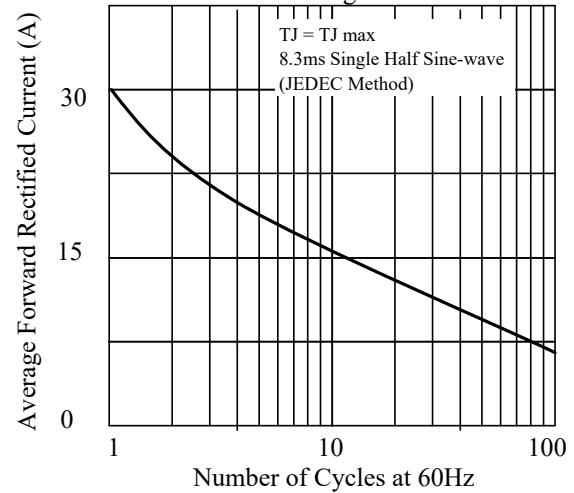


Fig 3. - Typical Instantaneous Forward Characteristics

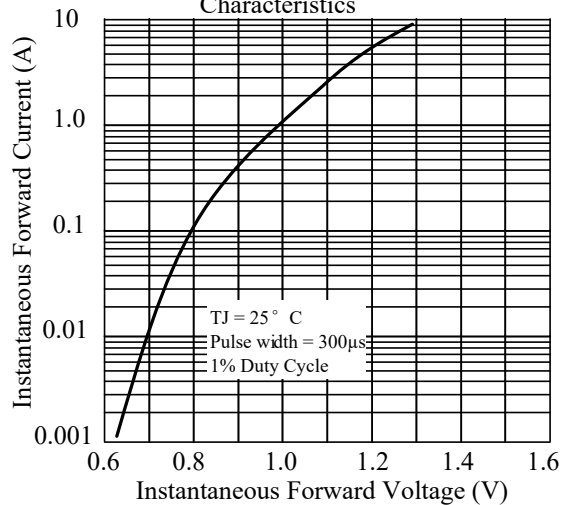


Fig 4. - Typical Reverse Characteristics

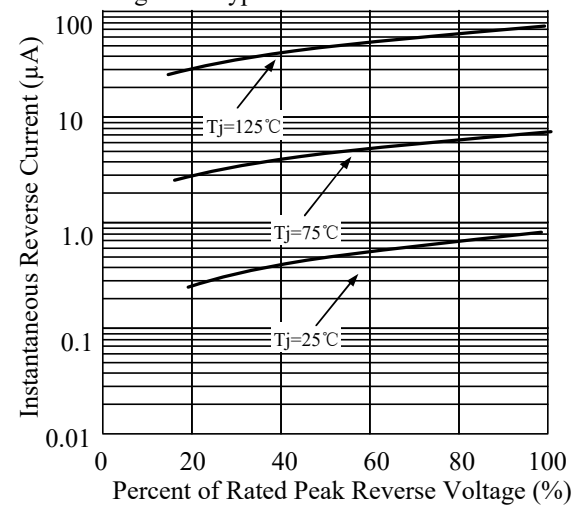


Fig 5. - typical transient thermal impedance

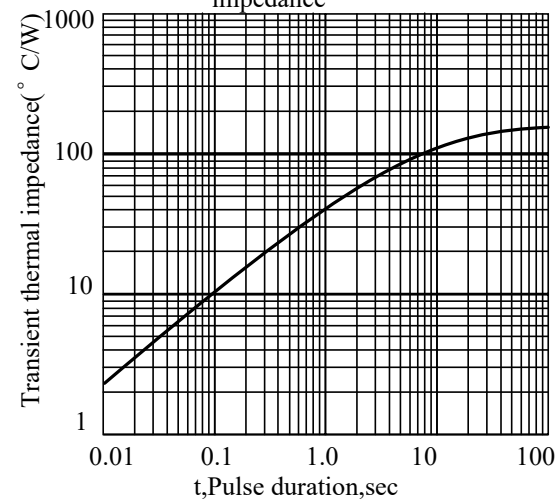
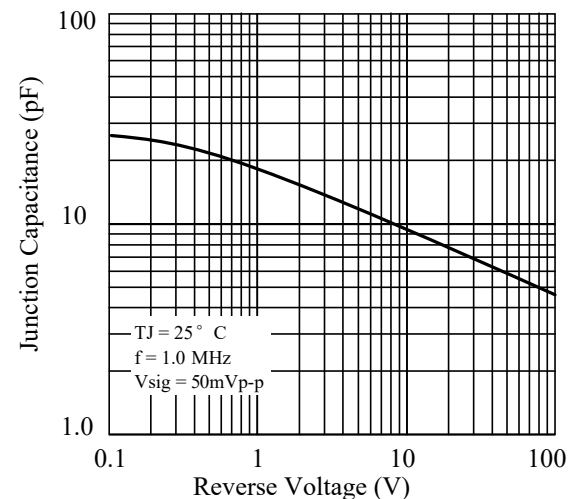
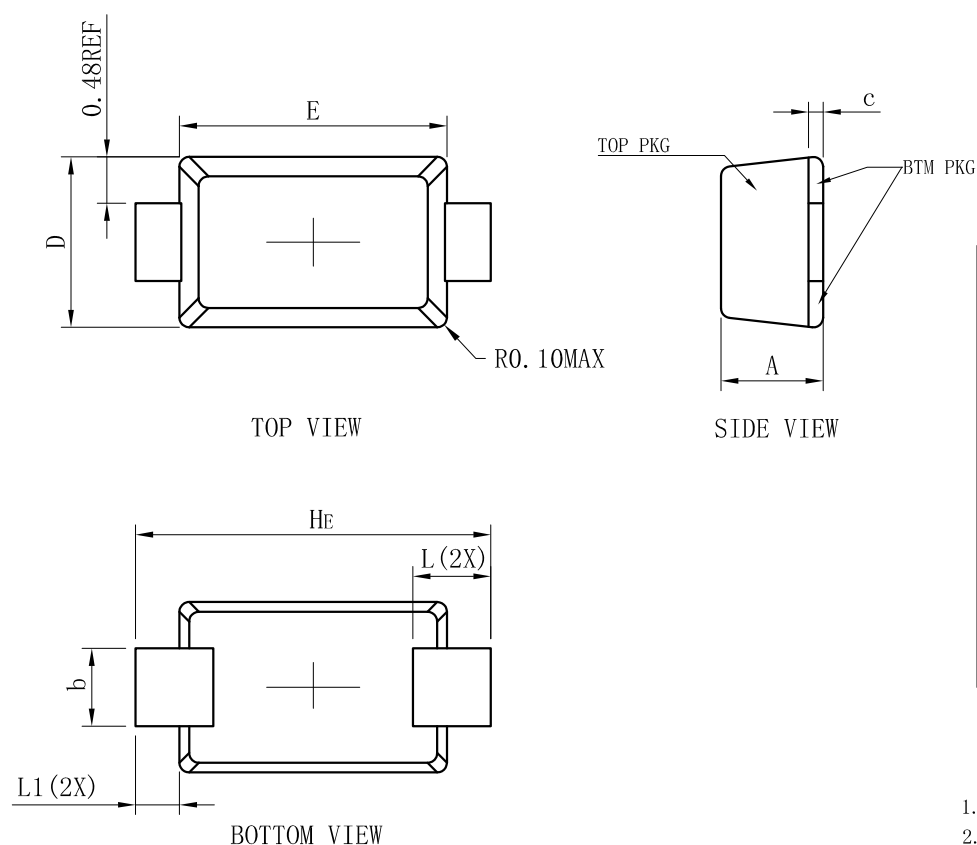


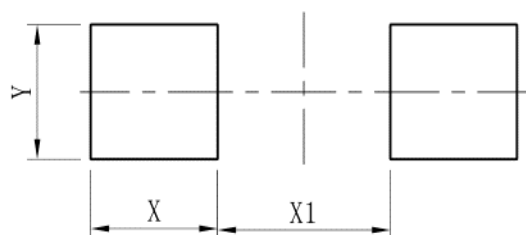
Fig 6. - Typical Junction Capacitance



## 6.OUTLINE AND DIMENSIONS



## 7.SOLDERING FOOTPRINT



DIM	(mm)
X	1.20
Y	1.10
X1	2.00

## **DISCLAIMER**

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