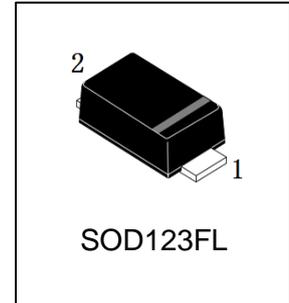


S-SOD4007-SH

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 compliance 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-SOD4007-SH	A7	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
Typical thermal resistance (Note 1)	RθJA	170	°C/W
	RθJL	40	°C/W
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 at rated DC blocking voltage TJ = 125°C	IR	-	-	5 50	μA
Typical junction capacitance at 4.0V, 1MHz	CJ	-	15	-	pF

Note: 1.8.0mm² (.013mm thick) land areas

5.ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

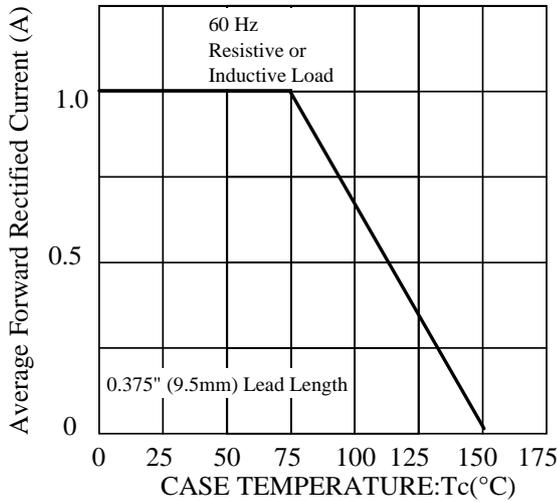


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

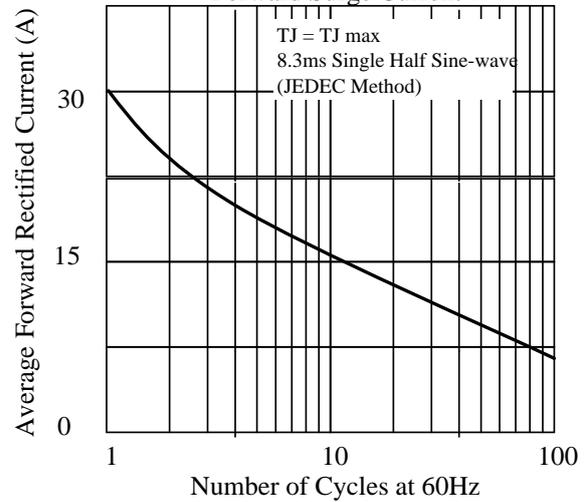


Fig 3. - Typical Instantaneous Forward Characteristics

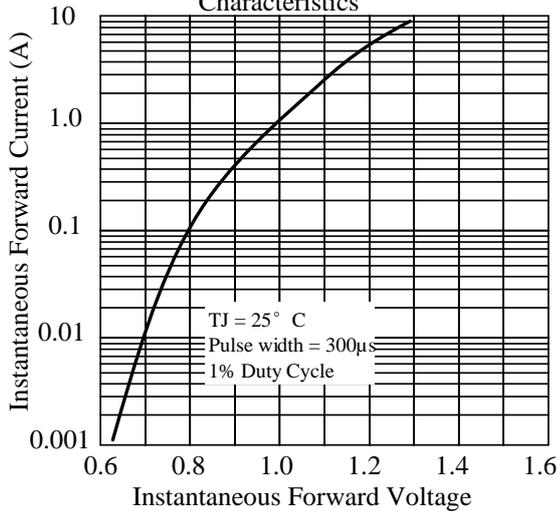


Fig 4. - Typical Reverse Characteristics

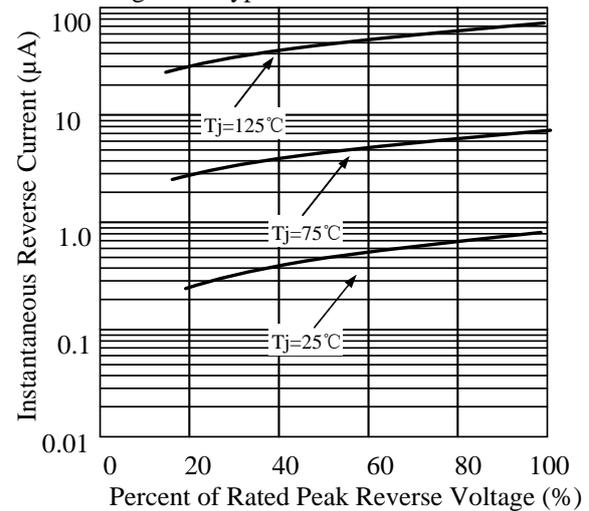


Fig 5. - typical transient thermal impedance

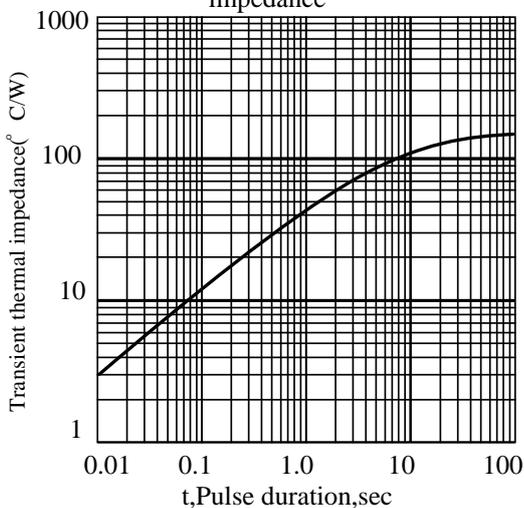
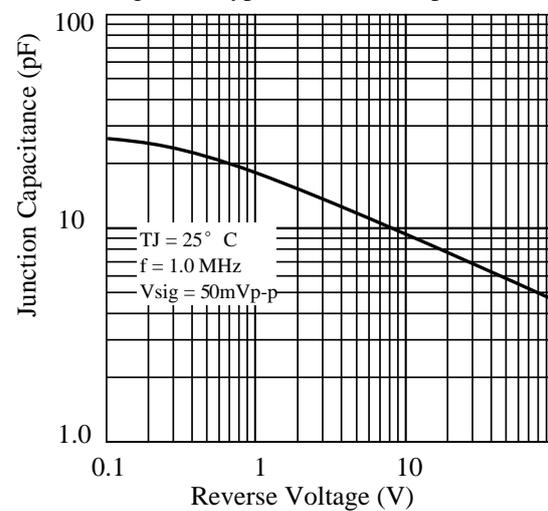
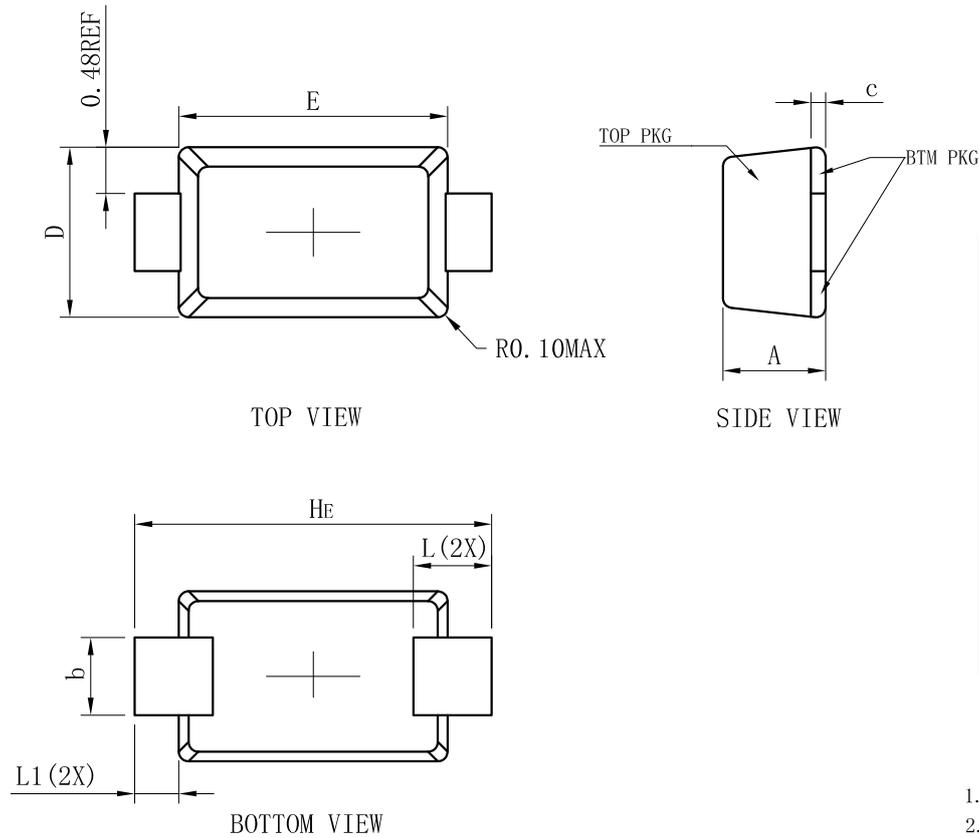
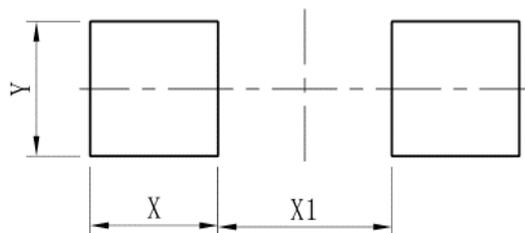


Fig 6. - Typical Junction Capacitance



6. OUTLINE AND DIMENSIONS

7. SOLDERING FOOTPRINT


DIM	(mm)
X	1.20
Y	1.10
X1	2.00

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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