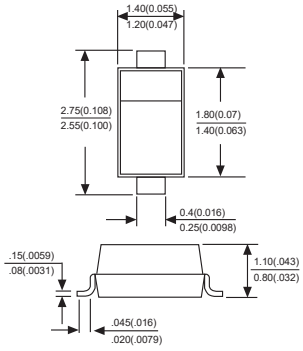
1N4001WS-AT THRU 1N4007WS-AT

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50-1000 Volts Forward Current - 0.8 Amperes

SOD-323



Dimensions in millimeters and (inches)

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

Case SOD-323
Terminals Plated leads solderable per MIL-STD-750, Method 2026
Weight 0.0044 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Number	*SYMBOLS*	4001	4002	4003	4004	4005	4006	4007	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at Tc= 25 ℃	$I_{(AV)}$	0.8							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	20							Amps
Maximum instantaneous forward voltage at 0.8A	V_F	1.0							Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	2.0 50.0							μA
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	55							°C/W
Typical reverse recovery time (NOTE 2)	T_{rr}	1800							Ns
Typical junction capacitance (NOTE 3)	C_J	5							pF
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

NOTE

(1) P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.

(2) Measured with I_F=0.5A,I_R =1A, I_{rr}=0.25A

(3) Measured at 1 MHz and applied reverse voltage of 4 V D.C

Fig.1 Forward Current Derating Curve

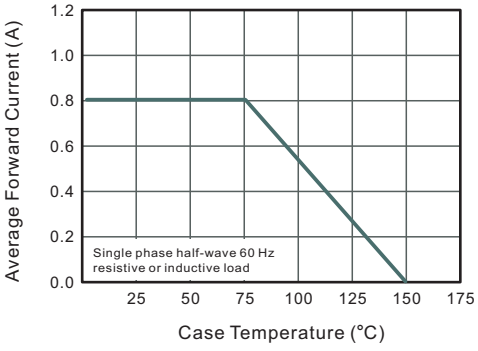


Fig.2 Typical Instaneous Reverse Characteristics

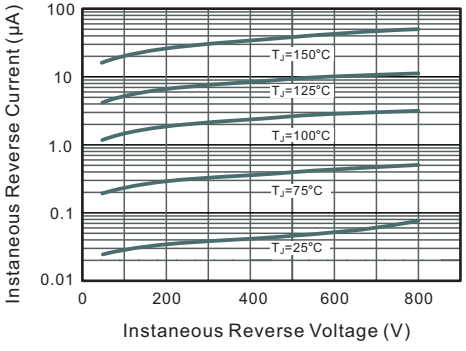


Fig.3 Typical Forward Characteristic

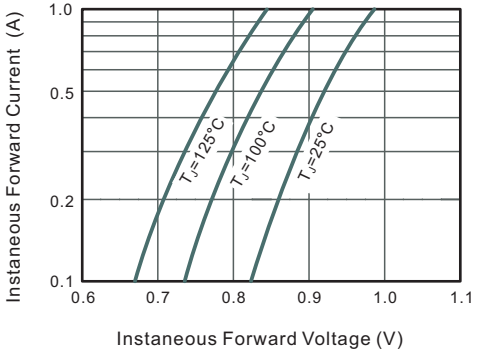


Fig.4 Typical Junction Capacitance

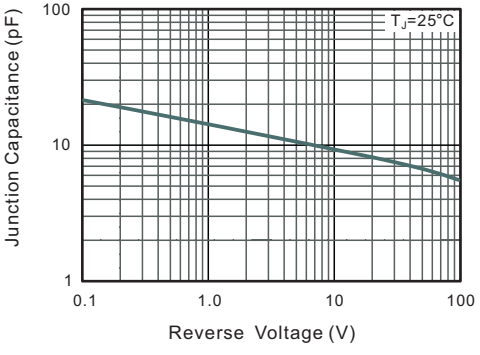
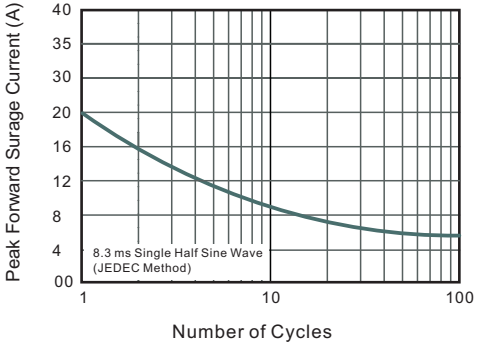


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

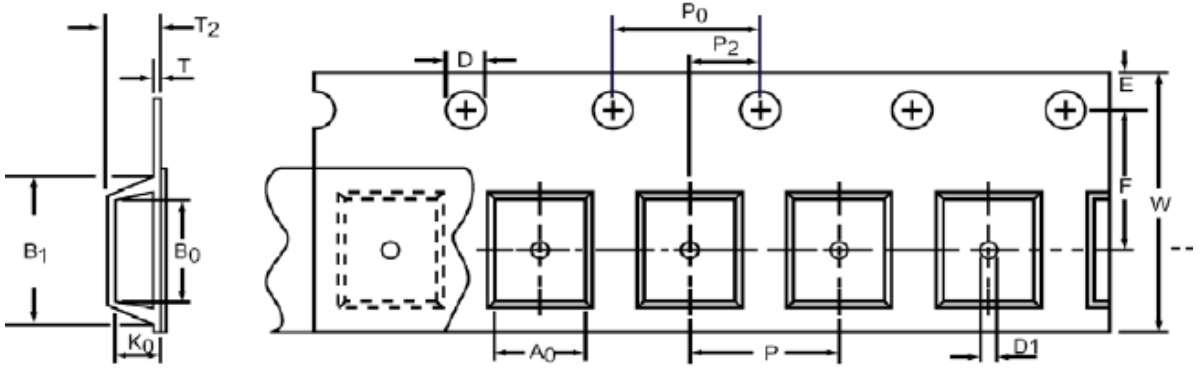


The cruve graph is for reference only, can't be the basis for judgment

Dated:09/2019
Rev: 1.0

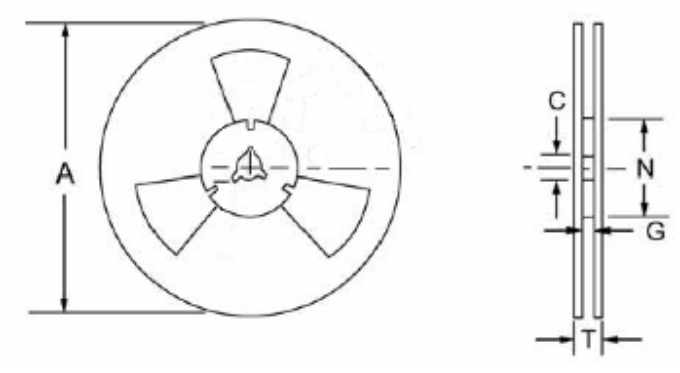
Packing Information:

Carrier Tape Dimensions (in mm)



Product Type	D	P0	P	W	E	A0	B0
	1.55±0.05	4.0±0.10	4.0±0.10	8.0+0.15/-0.3	1.75±0.10	1.50±0.10	2.75±0.10
SOD-323	B1	T	T2	D1	F	K0	P2
	4.0±0.10	0.20±0.05	1.2±0.1	1.0±0.10	3.5±0.05	0.95±0.10	2.0±0.05

Reel Dimensions (in mm)



A	C	G	N	T
178.0±2.0	13.5±1.0	9.9 max.	50 min.	14.4 max.

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