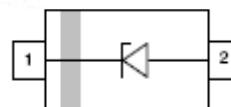


■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion



SOD-323

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Catalog Number	SYMBOLS	4001	4002	4003	4004	4005	4006	4007	UNITS
Markings		A1	A2	A3	A4	A5	A6	A7	
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 $T_C=125^\circ\text{C}$	I_{AV}	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	55							$^\circ\text{C/W}$
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							$^\circ\text{C}$

NOTE

- (1) P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.
- (2) Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$
- (3) Measured at 1 MHz and applied reverse voltage of 4 V D.C

Fig.1 Forward Current Derating Curve

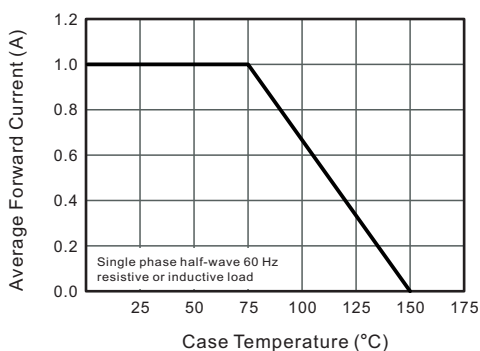


Fig.2 Typical Instaneous Reverse Characteristics

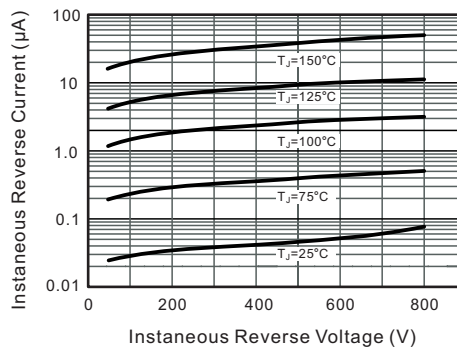


Fig.3 Typical Forward Characteristic

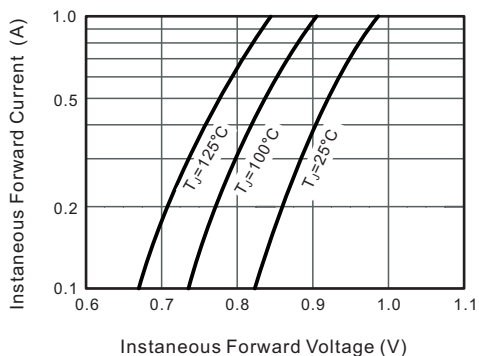


Fig.4 Typical Junction Capacitance

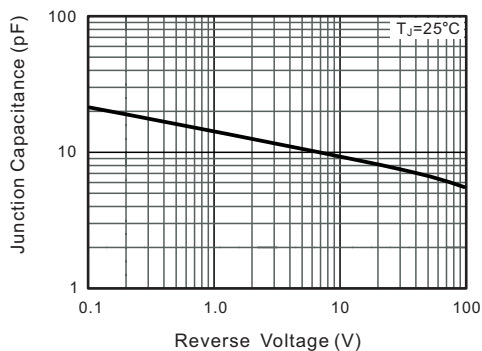
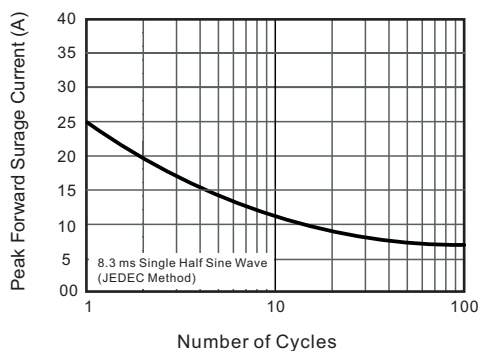
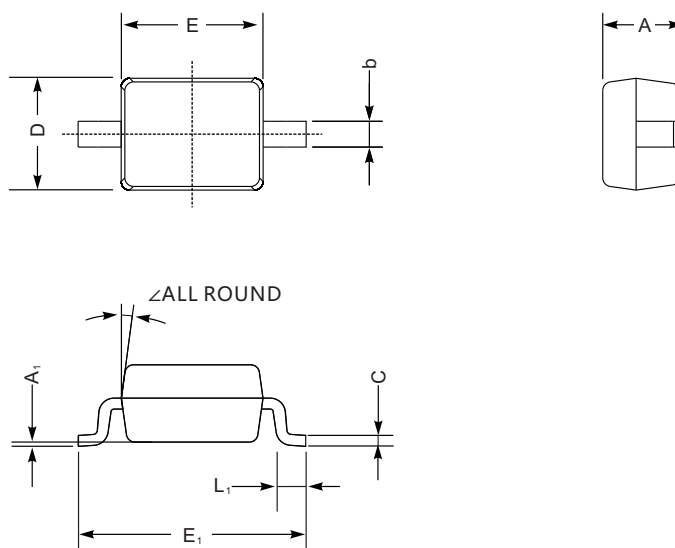


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



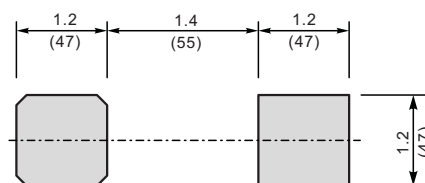
The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{(\text{mil})}$