

Features

1. Fast switching speed
2. Surface mount package ideally suited for automatic insertion
3. For general purpose switching applications
4. High conductance

Mechanical Data

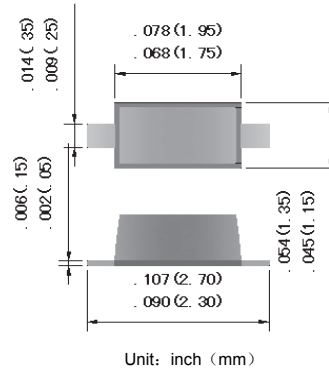
Case : JEDEC SOD-323 molded plastic body

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

Polarity : Polarity symbols marked on case

Weight : 0.0007 ounce, 0.02 grams

Marking: T4

SOD-323


Dimensions in inches and (millimeters)

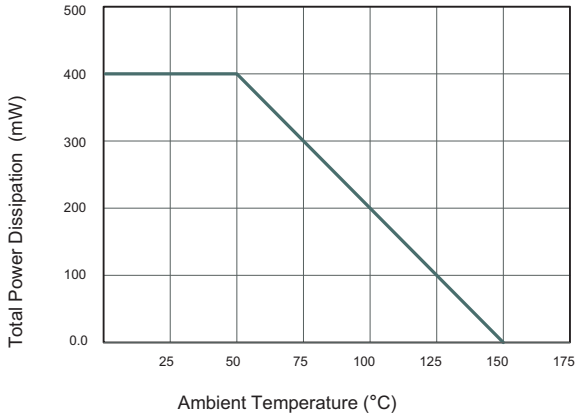
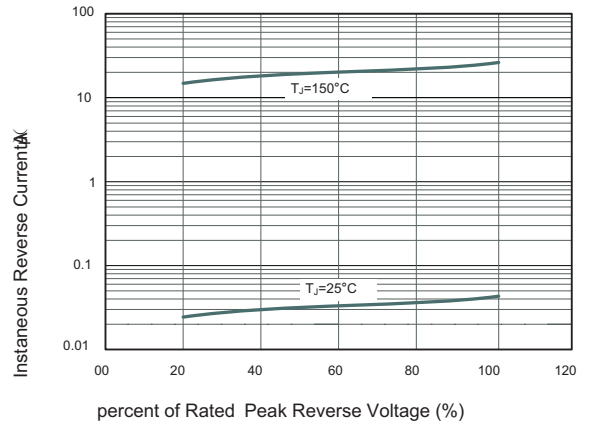
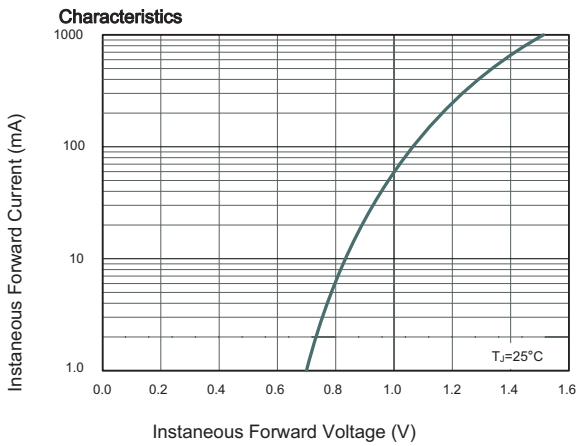
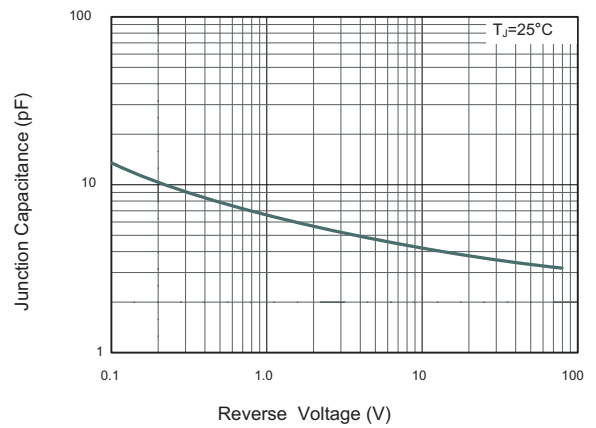
Maximum Ratings And Electrical Characteristics

PARAMETER	SYMBOLS	Limits	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	75	
Reverse Breakdown voltage at $I_R=1\mu A$	$V_{(BR)R}$	75	
Forward continuous current	I_{FM}	300	mA
Average rectified output current	I_o	150	mA
Peak forward current @=1.0MS	I_{FSM}	4.0	A
Power dissipation	P_d	400	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	250	°C/W
Junction temperature	T_j	125	°C
Storage temperature	T_{STG}	-55 to +150	°C

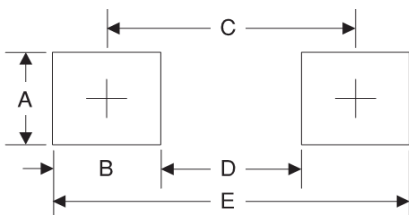
Absolute Maximum Ratings at 25°C

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	$I_F=1.0mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1.0	V	$I_F=50mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse current	I_{R1}			0.025	μA	at $V_R=20V$ $T_j=25^\circ C$
	I_{R2}			1	μA	at $V_R=75V$ $T_j=25^\circ C$
	I_{R3}			30	μA	at $V_R=25V$ $T_j=150^\circ C$
	I_{R4}			50	μA	at $V_R=75V$ $T_j=150^\circ C$
Capacitance between terminals	C_T			5	pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1X I_R, R_L=100 \Omega$

Typical Characteristics

Fig.1 Forward Current Derating Curve

Fig.2 Typical Reverse Characteristics

Fig.3 Typical Instantaneous Forward

Fig.4 Typical Junction Capacitance


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	0.7	0.028
B	0.7	0.028
C	2.15	0.085
D	1.8	0.071
E	2.85	0.112