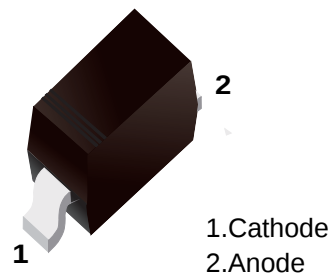


■ Rectifier Diodes

■ Features

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



■ Simplified outline(SOD-323)

Top View

■ Marking

Marking	T7
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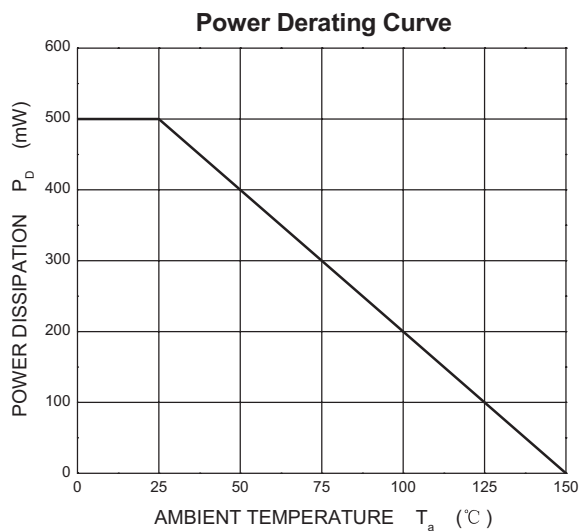
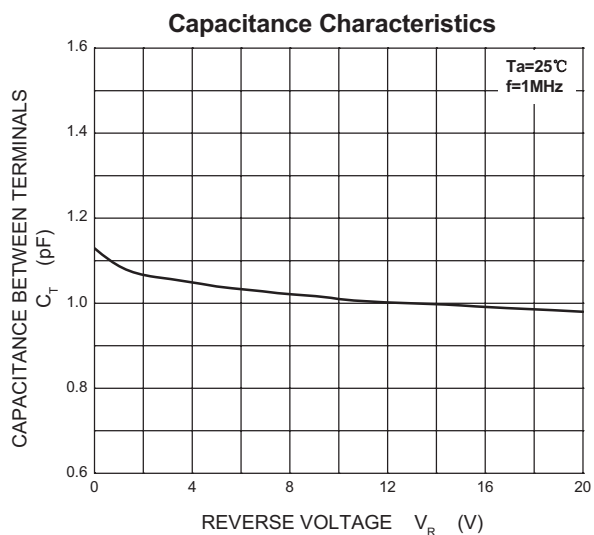
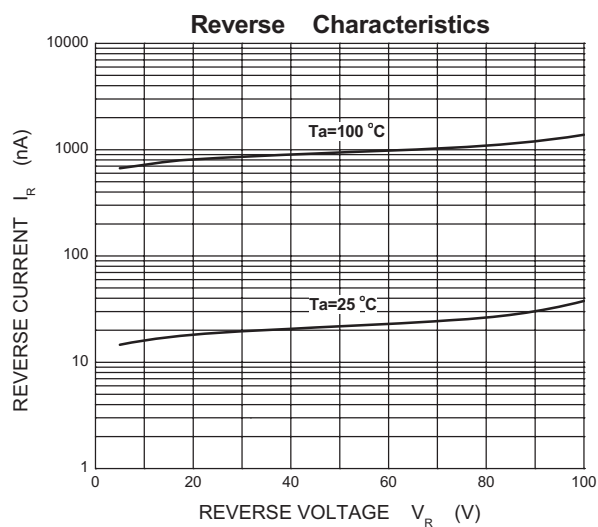
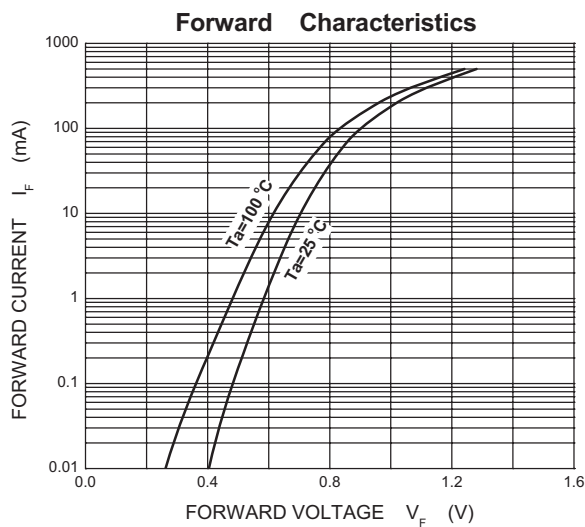
■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	300	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	300	
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	71	
Average Rectified Output Current	I_O	300	mA
Forward Continuous Current	I_{FM}	400	
Peak Forward Surge Current @ t=1us	I_{FSM}	2	A
@ t =1s		1	
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu A$	100			V
Forward voltage	V_{F1}	$I_F=1mA$			0.715	
	V_{F2}	$I_F=10mA$			0.855	
	V_{F3}	$I_F=50mA$			1	
	V_{F4}	$I_F=150mA$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R=75V$			1	μA
	I_{R2}	$V_R=20V$			25	nA
Junction capacitance	C_j	$V_R=0V, f=1MHz$			2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$			4	ns

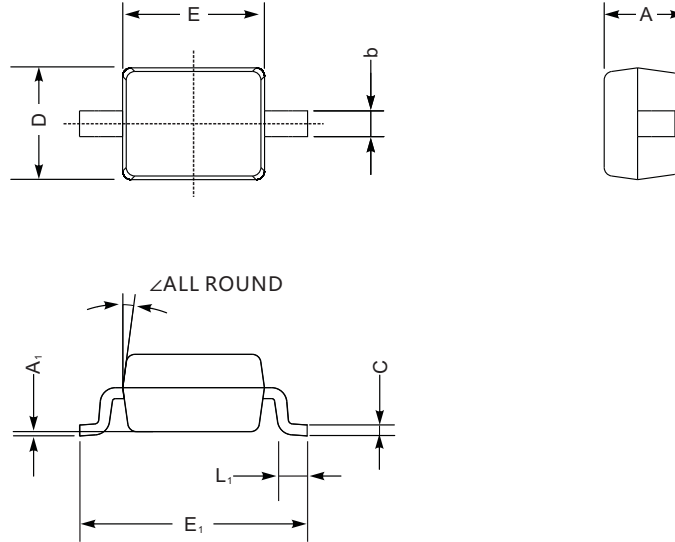
■ Typical Characteristics



Package Outline

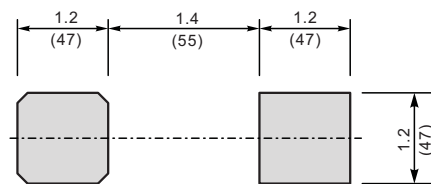
SOD-323

Plastic surface mounted package; 2 leads



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

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel, 7" reel	3000	EIA-481-1