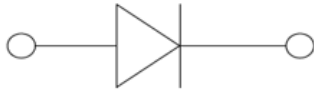


High Speed Switching Diode



SOD323

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 75V
- I_{FAV} 150mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- Extreme fast switches

Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T4

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Peak Forward Surge Current	I_{FSM}	A	$t_p=1\mu\text{s}$	2
Average Forward Current	I_{FAV}	mA		150
Power Dissipation	P_{tot}	mW		200
Thermal Resistance	R_{thJA}	K/W		625
Maximum Junction Temperature	T_j	$^\circ\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Forward Voltage	V_F	V	$I_F=10\text{mA}$	1.0
Maximum Reverse Current	I_R	nA	$V_R=20\text{V}$	25
	I_R	μA	$V_R=75\text{V}$	1.0
Minimum Breakdown Voltage	V_R	V	$I_R=1\mu\text{A}$	75
Maximum Diode Capacitance	C_D	pF	$V_R=V_F=0\text{V}$, $f=1\text{MHz}$	4
Maximum Reverse Recovery Time	t_{rr}	ns	$I_F=50\text{mA}$, $I_{rr}=0.1I_R$, $R_L=100\Omega$	4

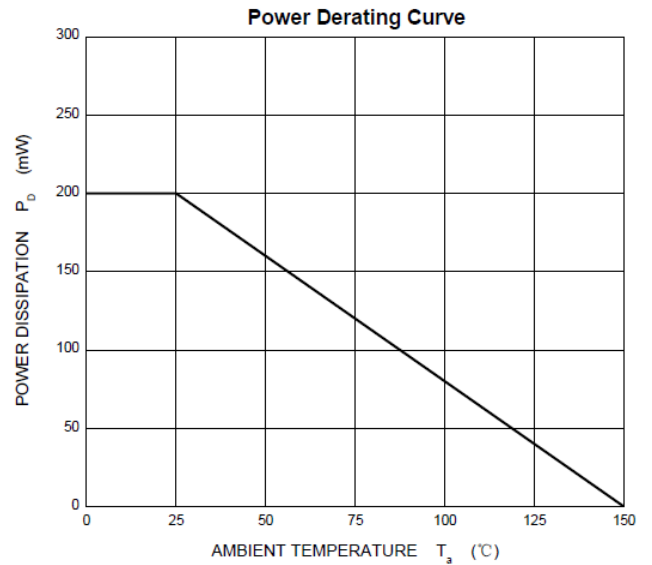
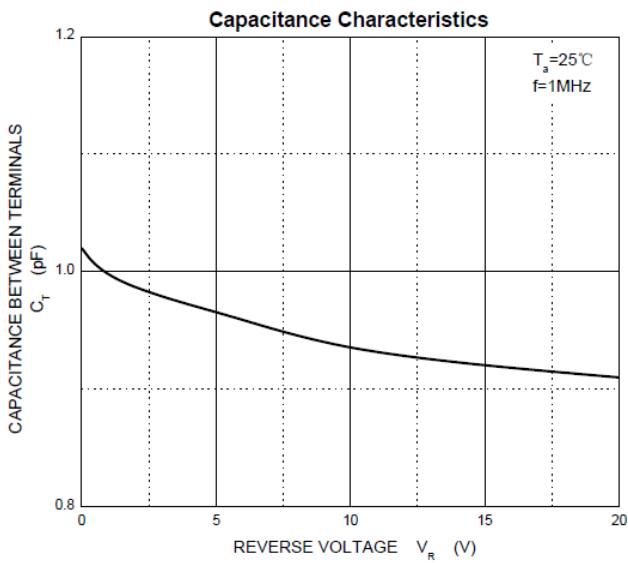
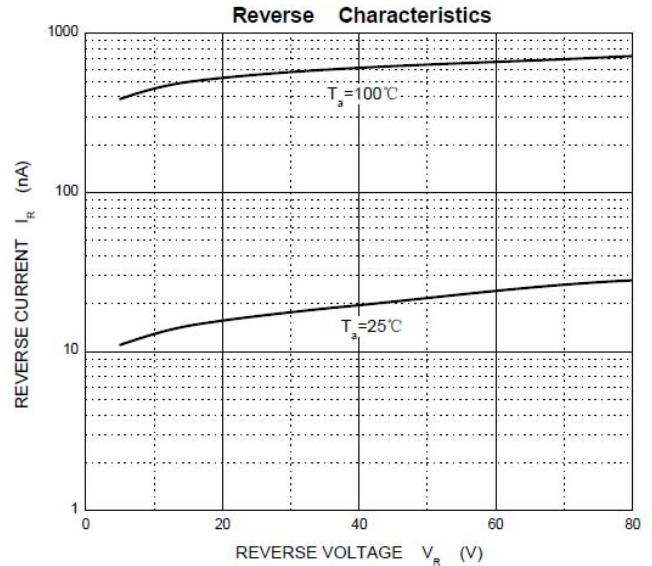
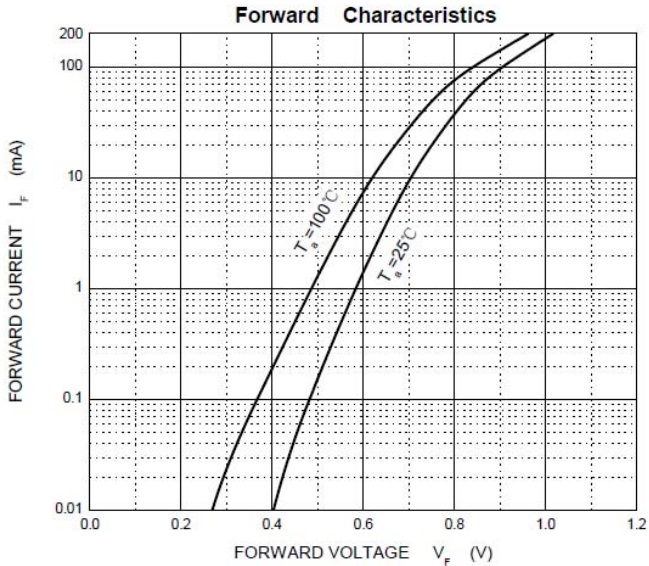


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Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WSQ	F2	Approximate 0.004	3000	30000	120000	7" reel

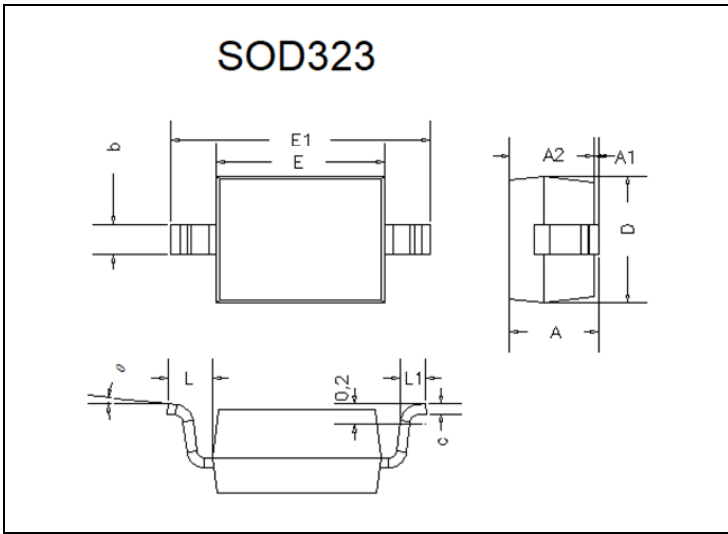
Characteristics (Typical)





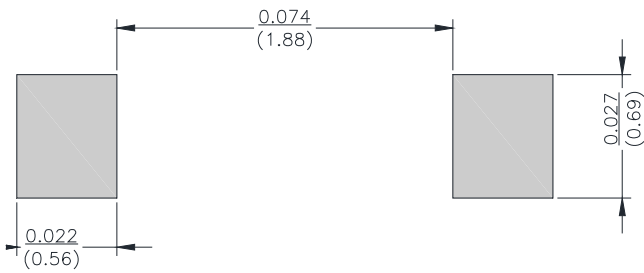
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■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	-	0.039	-	1.00	
A1	0.000	0.004	0.00	0.10	
A2	0.031	0.035	0.80	0.90	
b	0.010	0.016	0.25	0.40	
c	0.003	0.007	0.08	0.17	
D	0.047	0.055	1.20	1.40	
E	0.063	0.071	1.60	1.80	
E1	0.098	0.106	2.50	2.70	
L	0.019REF		0.475REF		
L1	0.008	0.016	0.20	0.40	
θ	0°	8°	0°	8°	

■ Soldering Footprint



Unit: $\frac{\text{inch}}{\text{mm}}$



1N4148WSQ

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