

High Speed Switching Diode

Features

- V_R 75V
- I_{FAV} 150mA

Typical Applications

- Extreme fast switches

Mechanical Data

- **Package:** SOD-323
- **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}	$^\circ\text{C}/\text{W}$		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

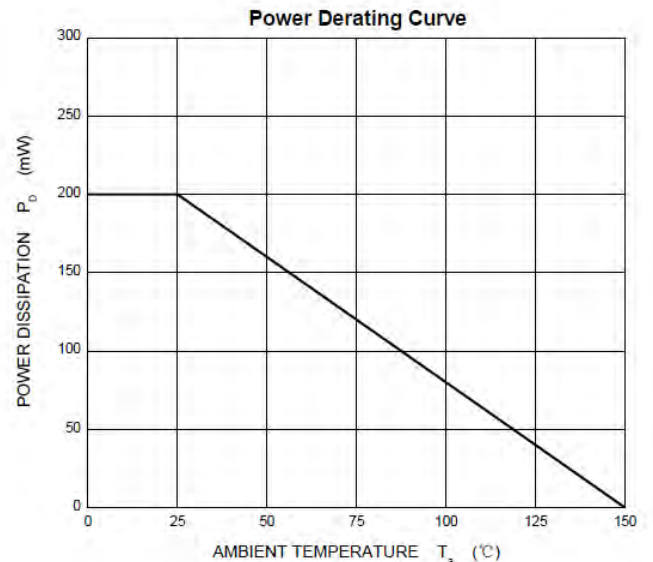
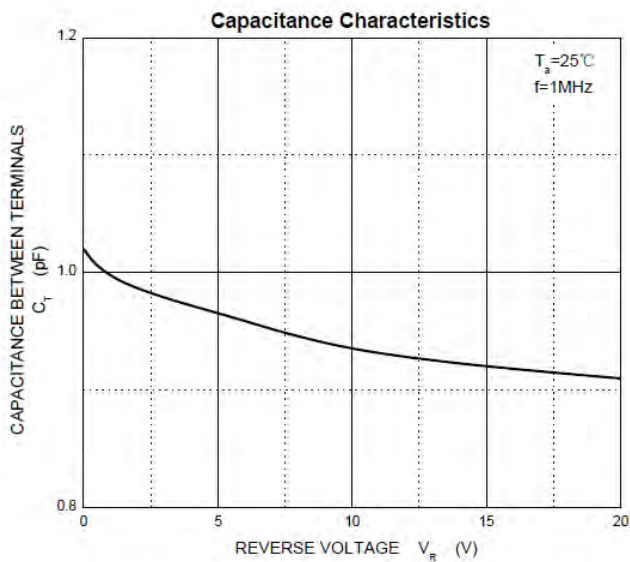
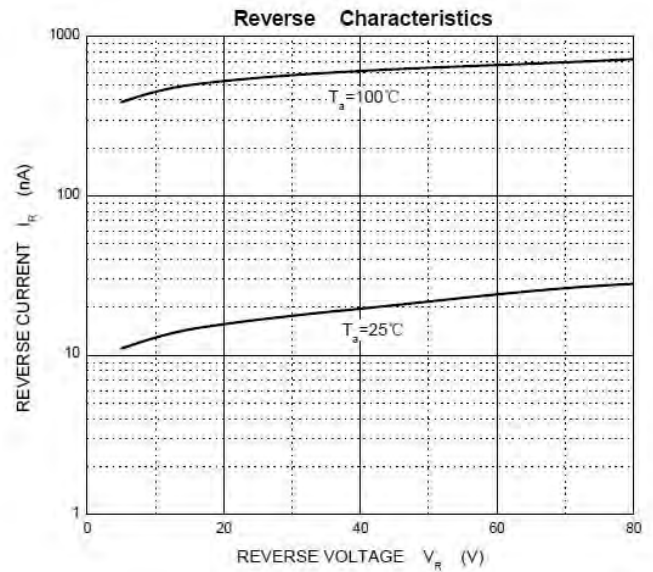
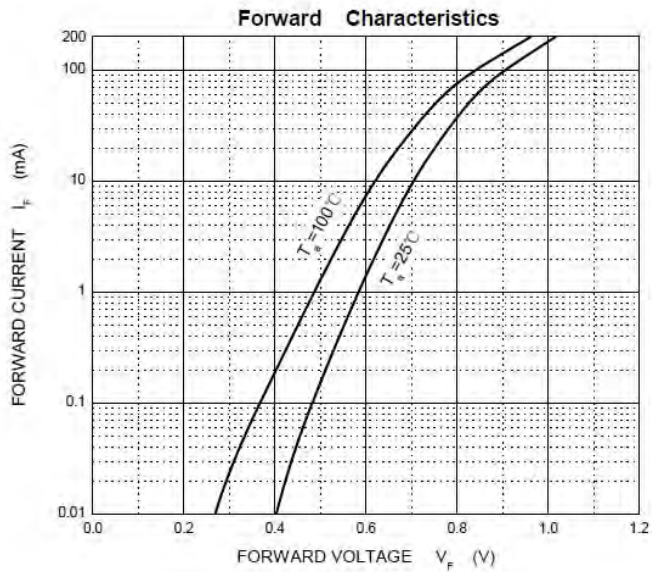


1N4148WS-Y

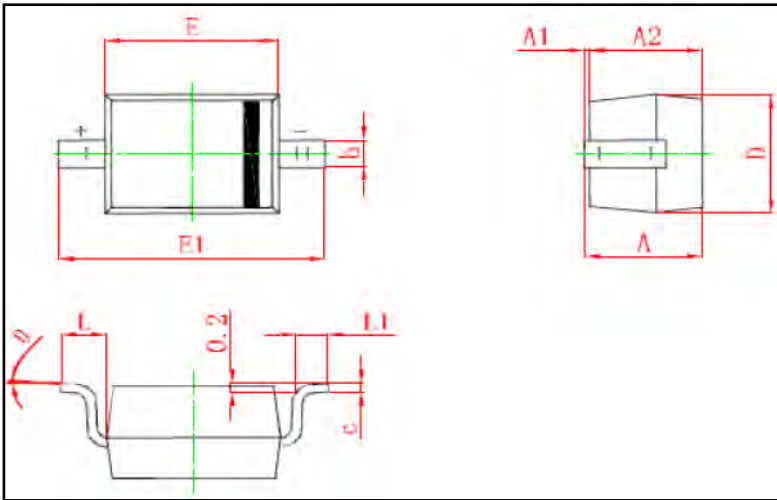
Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WS	F2	Approximate 0.004	3000	30000	120000	7" reel

Characteristics (Typical)

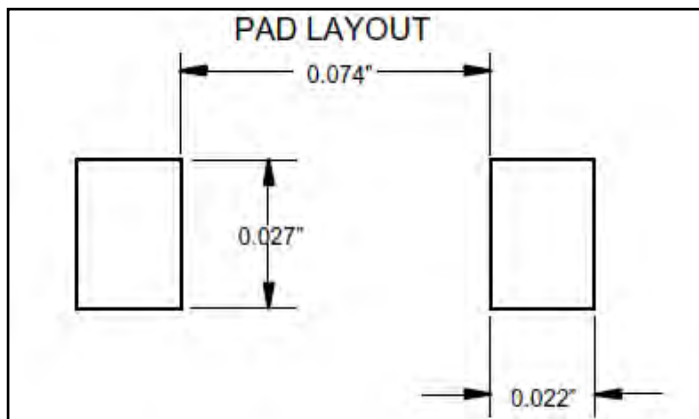


Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

Soldering Footprint



Unit: inches