

Small-Signal Fast Switching Diodes

Features

- VR 100V
- I_{FAV} 150mA

Typical Applications

- Extreme fast switches

Mechanical Data

- **Package:** SOD-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T4



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		100
Reverse voltage	V _R	V	I _R =100uA	100
Peak forward surge current	I _{FSM}	A	Pulse width=1 us Pulse width=1 s	2 1
Average forward current	I _{FAV}	mA		150
Power dissipation	P _{tot}	mW		150
Maximum junction temperature	T _j	°C		-55 to +150
Storage temperature range	T _{stg}	°C		-55 to +150

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V _R	V	I _R =100uA	100	
Forward Voltage	V _F	V	I _F =5mA		0.715
			I _F =10mA		0.855
			I _F =100mA		1.00
			I _F =150mA		1.25
Reverse Leakage Current	I _{R1}	nA	V _R =20V		25
	I _{R2}	uA	V _R =75V		1
Capacitance	C	pF	V _R =0V, f=1MHz		4
Reverse Recovery Time	T _{rr}	ns	I _F =I _R =10mA, I _{rr} =0.1*I _R , R _L =100Ω		4



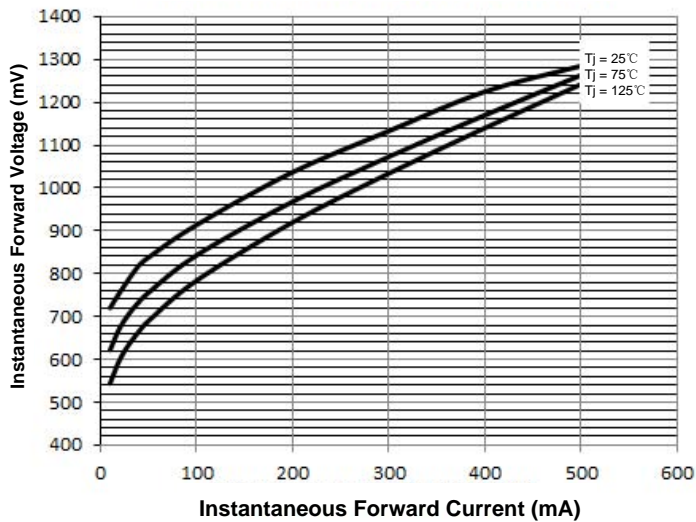
1N4148WT

Ordering Information (Example)

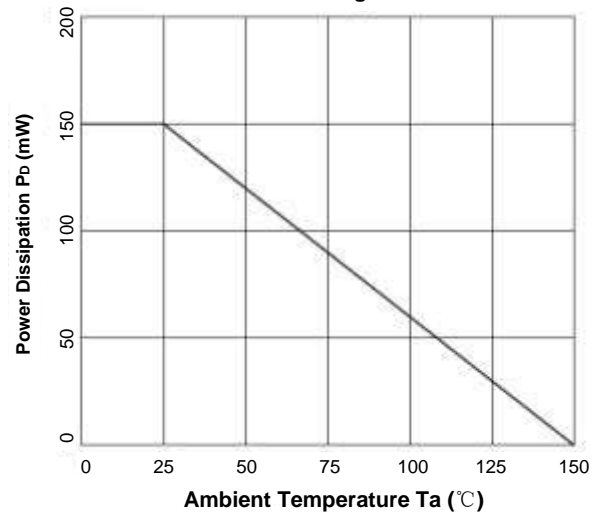
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WT	F2	Approximate 0.002	8000	80000	320000	7" reel

Characteristics (Typical)

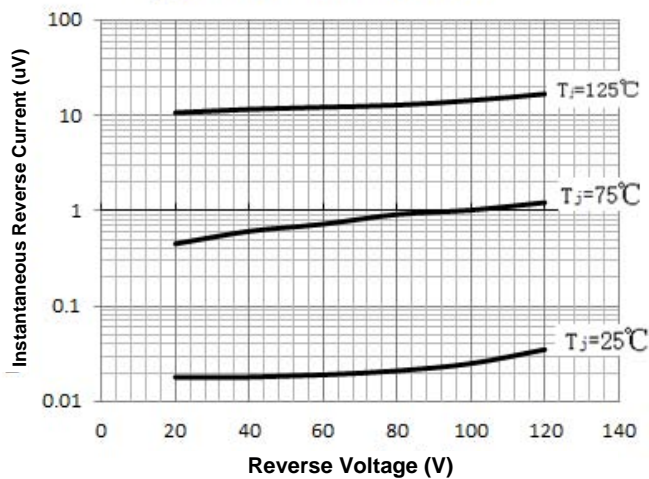
Typical Instantaneous Forward Characteristics



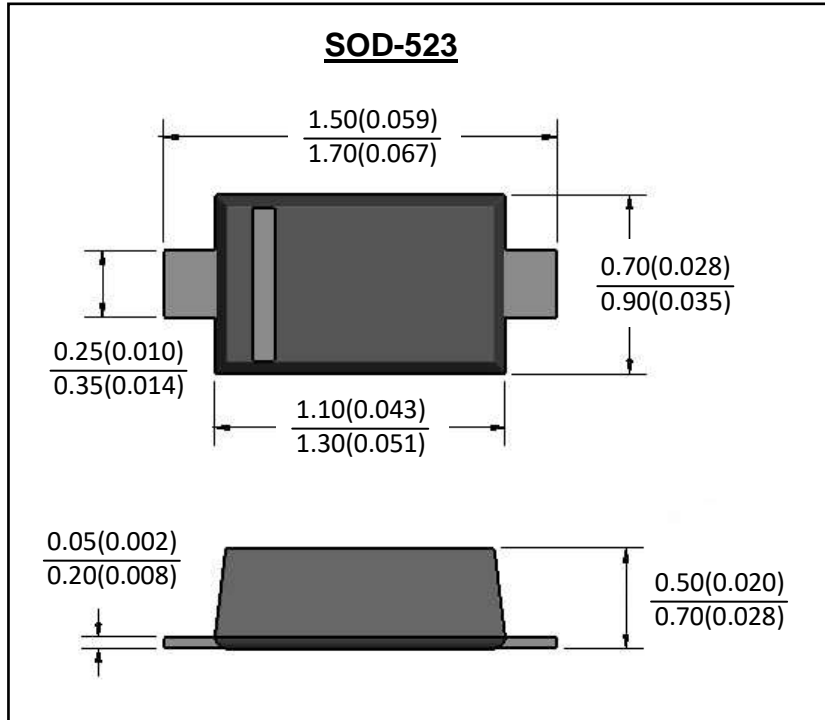
Power Derating Curve



Typical Reverse Characteristics



Outline Dimensions



Soldering Footprint

