

1N4148WT

PRV : 100 Volts

I_o : 125 mA

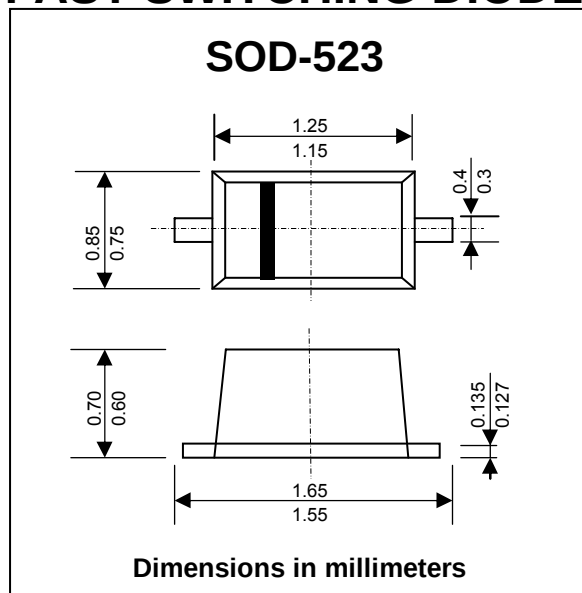
FEATURES :

- * Fast switching diodes.
- * Ultra-Small Surface Mount Package
- * For General Purpose Switching Applications
- * High Conductance
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-523 plastic
- * Moisture Sensitivity : Level 1 per J-STD-020A
- * Polarity : Cathode Band
- * Terminals : Finish - Matte Tin
Solderable per MIL-STD-202, Method 208
- * Marking Code : " WB"

SURFACE MOUNT FAST SWITCHING DIODE



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS (T_J = 25 °C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	250	mA
Average Rectified Output Current	I _{F(AV)}	125	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μs	I _{FSM}	2.0	A
@ t = 100 μs		1.0	
Power Dissipation	P _{tot}	150	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	833	°C/W
Operating Junction Temperature Range	T _J	-65 to + 150	°C
Storage Temperature Range	T _{STG}	-65 to + 150	°C

ELECTRICAL CHARACTERISTICS (T_J = 25 °C)

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage ⁽¹⁾	I _R = 1.0 μA	V _{(BR)R}	75	-	-	V
Forward Voltage	I _F = 1.0 mA	V _F	-	-	0.715	V
	I _F = 10 mA		-	-	0.855	
	I _F = 50 mA		-	-	1.00	
	I _F = 150 mA		-	-	1.25	
Peak Reverse Current ⁽¹⁾	V _R = 75 V	I _R	-	-	1.0	μA
	V _R = 75 V, T _J = 150 °C		-	-	50	μA
	V _R = 25 V, T _J = 150 °C		-	-	30	μA
	V _R = 20 V		-	-	25	nA
Total Capacitance	V _R = 0 V, f = 1MHz	C _T	-	-	2	pF
Reverse Recovery Time	I _{rr} = 0.1I _R , I _F = I _R = 10 mA, R _L = 100 Ω	T _{rr}	-	-	4	ns

Note : (1) Short duration pulse test used to minimize self- heating effect.

RATING AND CHARACTERISTIC CURVES (1N4148WT)

FIG.1 - DERATING CURVE

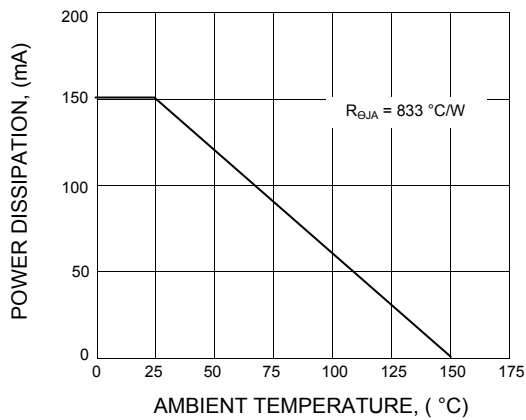


FIG.2 - TYPICAL CAPACITANCE VS. REVERSE VOLTAGE

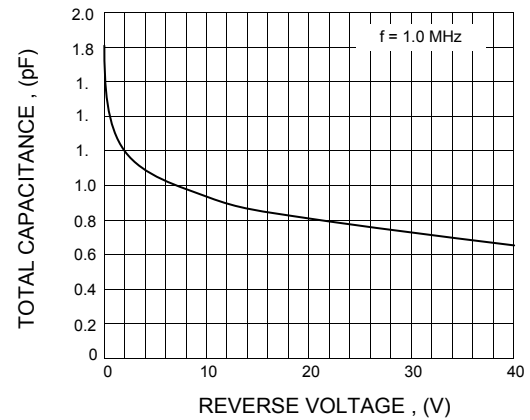


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

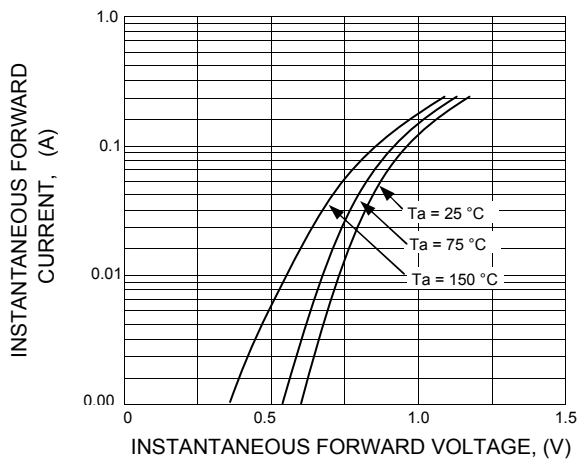


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

