



# 1N4148WT

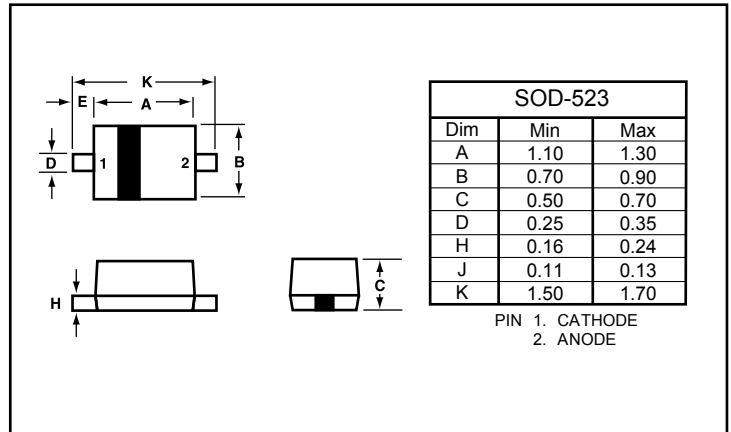
## SURFACE MOUNT FAST SWITCHING DIODE

### Features

- Extremely fast reverse recovery time to reduce switching losses
- Very low capacitance for reduced insertion losses
- Reverse voltage rating of 80V
- Also available in lead-free plating (100% matte tin finish)

### APPLICATION

- Mobile phones and accessories
- Hand-held computers
- High Speed Switching Applications



### Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
DC Reverse voltage	$V_R$	80	V
Continuous forward current	$I_F$	225	mA
Surge current	$I_{FSM}$	0.5	A
Total power dissipation	$P_{tot}$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55-150	$^\circ\text{C}$

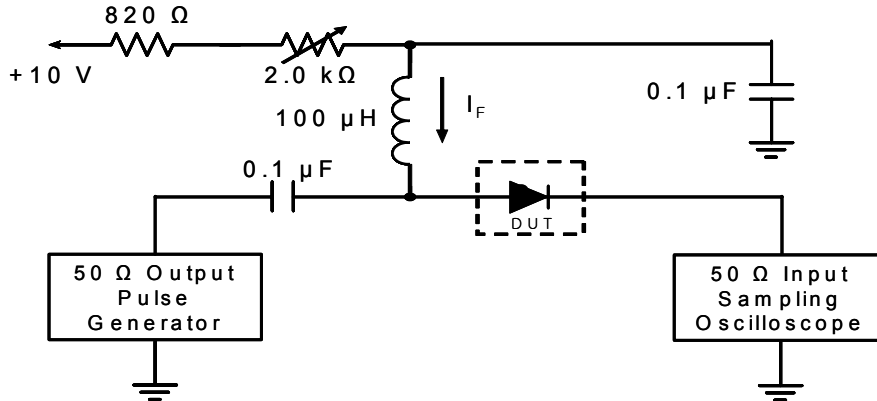
### Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$			1.2	V	$I_F=100\text{mA}$
Reverse current	$I_R$			0.1	$\mu\text{A}$	$V_R=80\text{V}$
Diode capacitance	$C_d$		0.72	2.0	pF	$V_R=0.5\text{V}, f=1\text{MHz}$
Reverse recovery time	$t_{rr}$			4	ns	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$



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## RATINGS AND CHARACTERISTIC CURVES



- Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current ( $I_F$ ) to 10mA  
 2. Input pulse is adjusted to  $I_{R(peak)}$  is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT

