

## Surface Mount Switching Diode

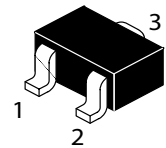
### Features:

- \* Low Current Leakage
- \* Low Forward Voltage
- \* Ultra High Speed Switching
- \* Surface Mount Package Ideally Suited for Automatic Insertion

### Mechanical Data:

- \* Case: SOT-323, Molded Plastic
- \* Terminal: Solderable per MIL-STD-202 Method 208
- \* Polarity: See Diagram
- \* Weight: 0.006 grams(approx)

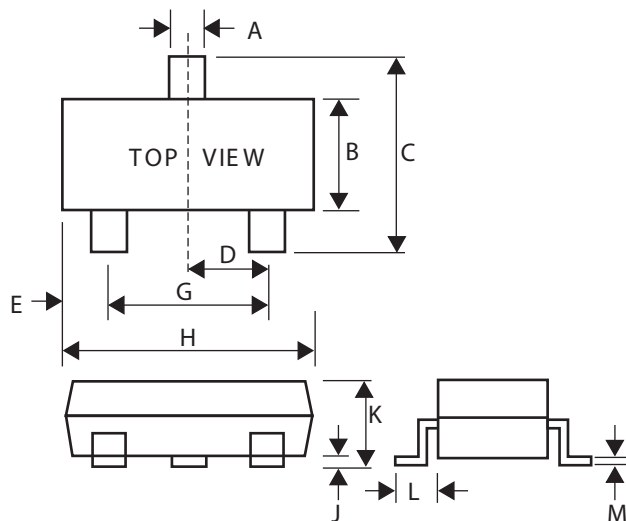
**SWITCHING DIODE**  
**100m AMPERRES**  
**80 VOLTS**



**SOT-323(SC-70)**

## SOT-323 Package Outline Dimensions

Unit:mm



**SOT-323**

Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.40
D	-	0.65
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.00	0.10
K	0.80	1.00
L	0.42	0.53
M	0.10	0.25

**Maximum Ratings** (EACH DIODE)

Characteristic	Symbol	WAN202U	WANP202U	WAN217U	Unit
Reverse Voltage	$V_R$	80			Volts
Forward Current	$I_F$	100			mAdc
Peak Forward Surge Current	$I_{FM}$	300			mAdc

**Thermal Characteristics**

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board *1, $T_A=25^\circ\text{C}$ Derate Above $25^\circ\text{C}$	$P_D$	200 1.6	mW mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction and Storage Temperature	$T_J, T_{stg}$	-55 to + 150	$^\circ\text{C}$

\*1 ER-5=1.0x0.75x0.062 in

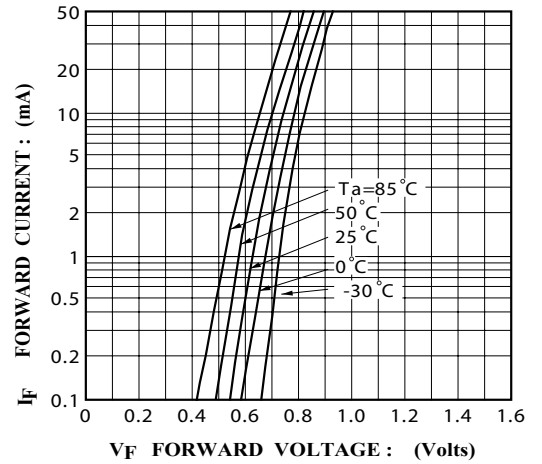
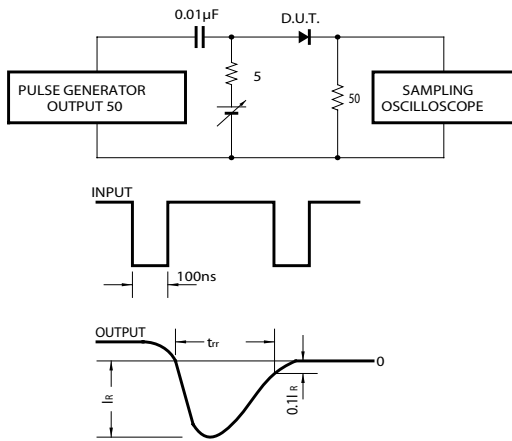
**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  Unless Otherwise Note) (Each Diode)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ( $I_{BR}=100\ \mu\text{Adc}$ )	$V_{BR}$	80		Vdc
Reverse Voltage Leakage Current $V_R=70\text{V}$	$I_R$		0.1	$\mu\text{Adc}$
Diode Capacitance ( $V_R=6\text{Vdc}$ , $f=1.0\text{MHz}$ )	$C_D$		3.5	PF
Forward Voltage ( $I_F=100\ \text{mAdc}$ )	$V_F$		1.2	Vdc
Reverse Recovery Time (Figure 1.) $I_R=5.0\ \text{mAdc}$ , $V_R=6.0\ \text{Vdc}$	$t_{rr}$		4.0	nS

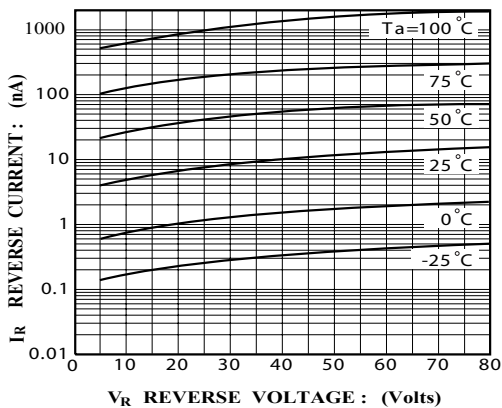
**Device Marking**

Item	Marking	Equivalent Circuit diagram
WAN202U	A4	
WAP202U	A1	
WAN217U	A7	

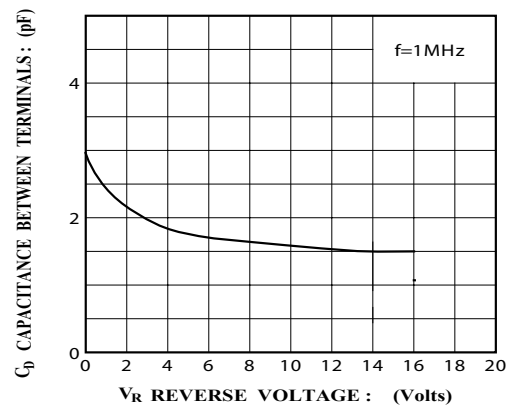
**FIG 1. Recovery Time Equivalent Test Circuit**



**FIG.2 Forward characteristics**



**FIG.3 Reverse characteristics**



**FIG.4 Capacitance**