

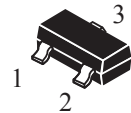
## Surface Mount Switching Diode

 Lead(Pb)-Free

### Features:

- \*Low Current Leakage
- \*Low Forward Voltage
- \*Ultra High Speed Switching
- \*Small Outline Surface Mount SOT-23 Package

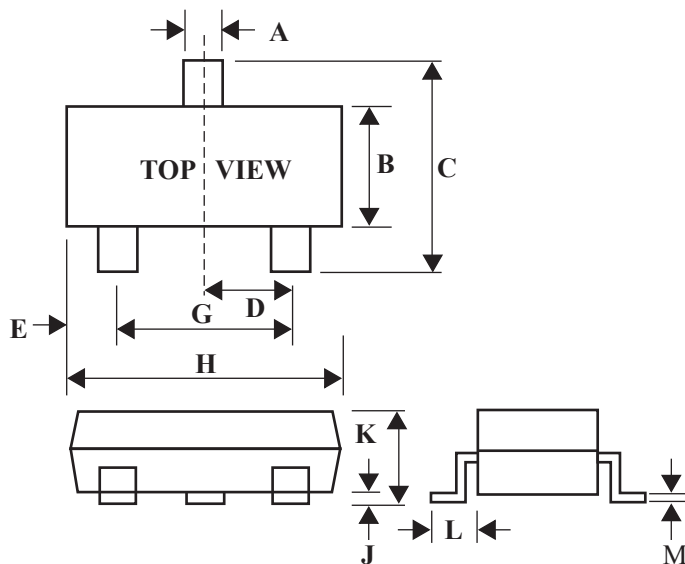
**SWITCHING DIODE**  
**100m AMPERRES**  
**80 VOLTS**



**SOT-23**

## SOT-23 Outline Dimensions

Unit:mm



Dim	Min	Max
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25

**Maximum Ratings** (EACH DIODE)

Characteristic	Symbol	WAN202K	WANP202K	WAN217	Unit
Reverse Voltage	V <sub>R</sub>	80			Volts
Forward Current	I <sub>F</sub>	100			mAdc
Peak Forward Surge Current	I <sub>FM</sub>	300			mAdc

**Thermal Characteristics**

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board *1, TA=25°C Derate Above 25°C	P <sub>D</sub>	200 1.6	mW mW/°C
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	°C/W
Junction and Storage Temperature	T <sub>J</sub> , T <sub>stg</sub>	-55 to + 150	°C

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

**Electrical Characteristics** (TA=25°C Unless Otherwise Note) (Each Diode)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (I <sub>BR</sub> =100 μAdc )	V <sub>BR</sub>	80		Vdc
Reverse Voltage Leakage Current V <sub>R</sub> =70V	I <sub>R</sub>		0.1	μAdc
Diode Capacitance (V <sub>R</sub> =6Vdc, f=1.0MHz)	C <sub>D</sub>		3.5	PF
Forward Voltage (I <sub>F</sub> =100 mAdc)	V <sub>F</sub>		1.2	Vdc
Reverse Recovery Time (Figure 1.) I <sub>R</sub> =5.0 mAdc, V <sub>R</sub> =6.0Vdc	t <sub>rr</sub>		4.0	nS

### Device Marking

Item	Marking	Equivalent Circuit diagram
WAN202K	A4	
WAP202K	A1	
WAN217	A7	

Figure 1. Recovery Time Equivalent Test Circuit

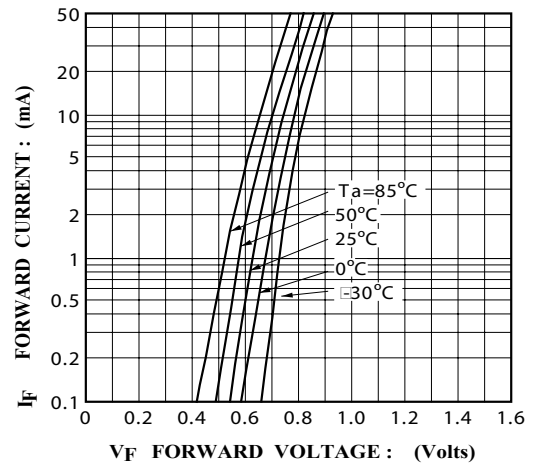
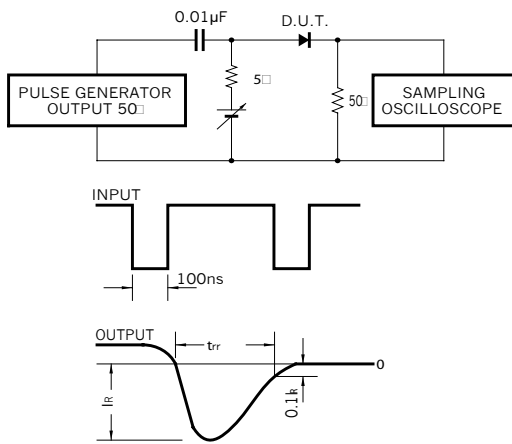


Fig.2 Forward characteristics

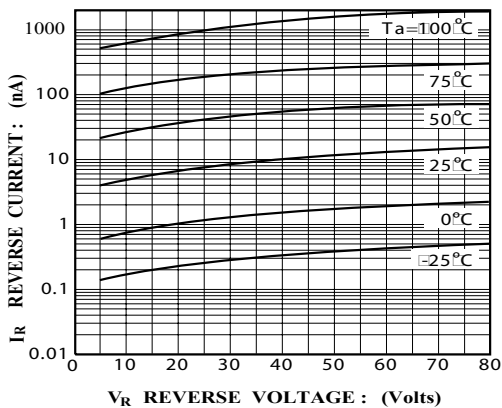


Fig.3 Reverse characteristics

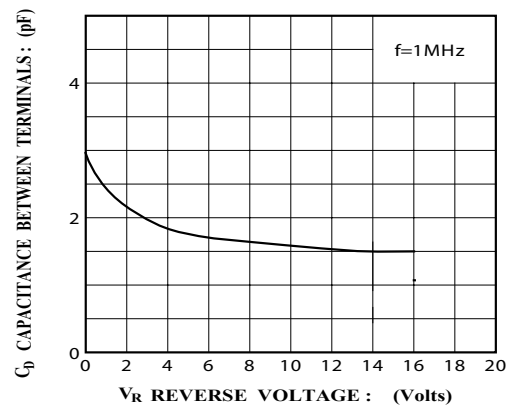


Fig.4 Capacitance