

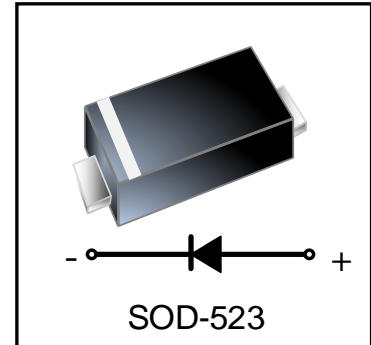


# WFR1N4148WT

## Fast Switching Diode

### Features

- Fast Switching Devices
- SOD-523 Thin SMD Package
- RoHS Compliant / Green EMC
- Matte Tin (Sn) Lead Finish
- Cathode Band / Device Marking



### Applications

- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

### Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	75	V
Forward Continuous Current	$I_{FM}$	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.0	A
Average Rectified Current	$I_o$	200	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics ( $T_{amb}=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 1mA$	-	-	0.715	V
		$I_F = 10mA$	-	-	0.855	
		$I_F = 50mA$	-	-	1.0	
		$I_F = 150mA$	-	-	1.25	
Reverse Current	$I_R$	$V_R = 75V$	-	-	1	$\mu A$
		$V_R = 20V$	-	-	25	nA
Reverse Breakdown Voltage	$V_{BR}$	$I_R = 1\mu A$	75	-	-	V
Diode Capacitance	$C_D$	$V_R = 0V, f = 1MHz$	-	-	2	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10mA, I_{RR} = 1mA$ $R_L = 100\Omega$	-	-	4	ns

Typical Characteristics

Figure 1.  $I_F$  vs.  $V_F$

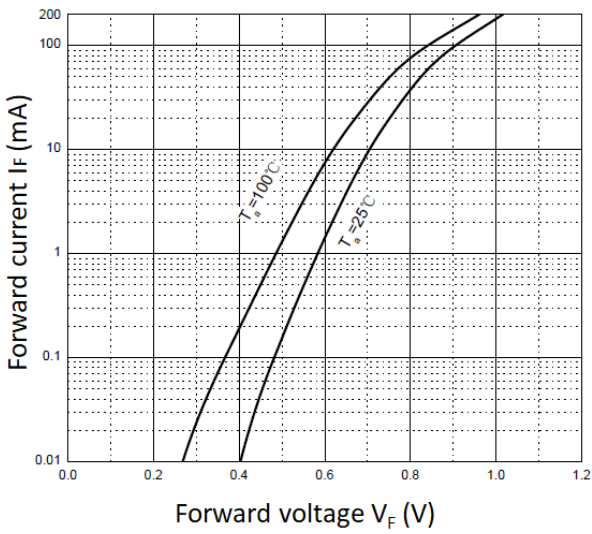


Figure 2.  $I_R$  vs.  $V_R$

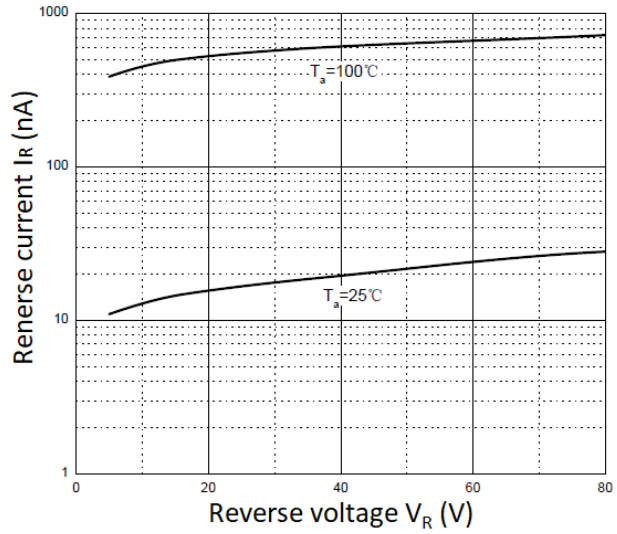


Figure 3. Capacitance Characteristics

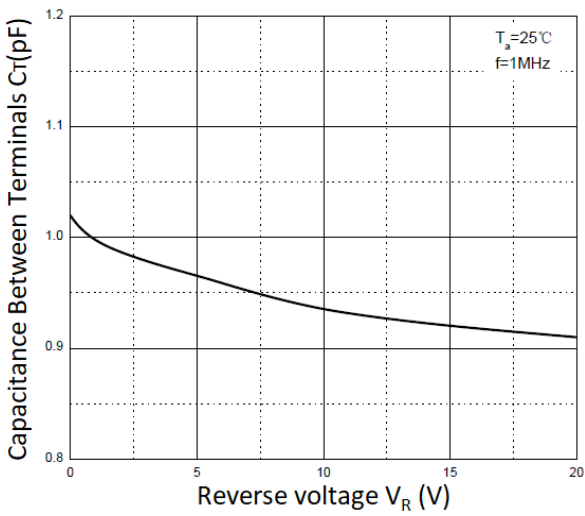
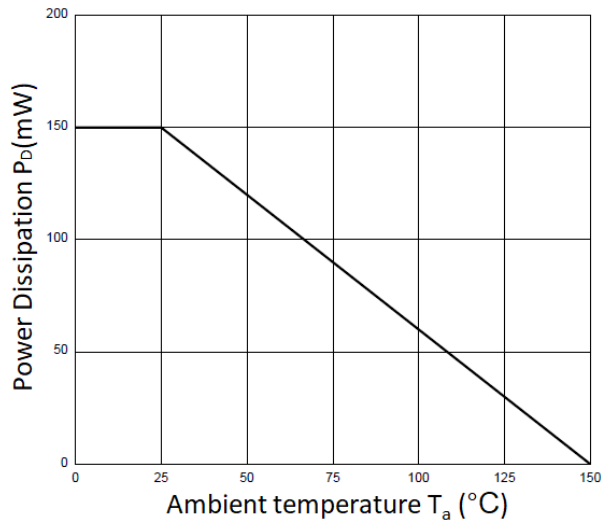


Figure 4. Power Derating Curve



Outline Drawing – SOD-523

**PACKAGE OUTLINE**

⊕	0.08 (0.0032)	X	Y
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**SOD-523**

**DIMENSIONS**

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.07	0.20	0.0028	0.0079
D	1.10	1.30	0.043	0.051
E	0.70	0.90	0.028	0.035
H <sub>E</sub>	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010

DIMENSIONS: MILLIMETERS

**Notes**

- Controlling Dimensions in Millimeters.
- Dimensions are exclusive of mold flash and metal burrs.

**Marking Codes**

Part Number	WFR1N4148WT
Marking Code	

**Package Information**

Qty: 5k/Reel

**CONTACT INFORMATION**

No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201207

Tel: 86-21-68969993 Fax: 86-21-50757680 Email: [market@way-on.com](mailto:market@way-on.com)

WAYON website: <http://www.way-on.com>

For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.  
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
Users should verify actual device performance in their specific applications.