



SHENZHEN LONG JING MICRO-ELECTRONICS CO., LTD.

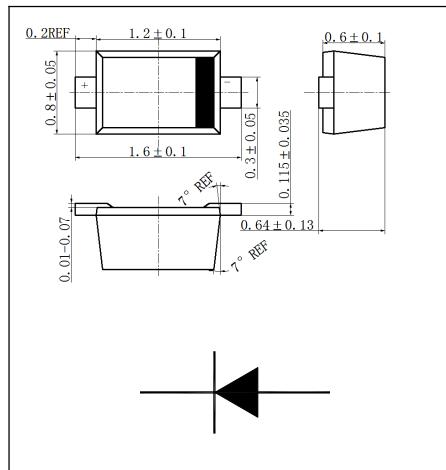
SOD-523 Plastic-Encapsulate Diodes

1N914WT

SURFACE MOUNT FAST SWITCHING DIODE

Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications



Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive peak reverse voltage	100	V
$I_{F(AV)}$	Average Rectified Output Current	200	mA
I_{FSM}	Peak Forward Surge Current Pulse Width = 1 s Pulse Width = 1 μs	0.5 1	A
P_{tot}	Power Dissipation	150	mW
R_{QJA}	Thermal Resistance Junction to Ambient	833	$^\circ\text{C}/\text{W}$
T_{STG}	Storage temperature	-55~+150	$^\circ\text{C}$
T_j	Junction Temperature	150	$^\circ\text{C}$

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
I_R	Reverse current	$V_R = 20\text{V}$ $V_R = 75\text{V}$			25 5	nA μA
$V_{(BR)}$	Reverse breakdown voltage	$I_R = 5\mu\text{A}$ $I_R = 100\mu\text{A}$	75 100			
V_F	Forward voltage	$I_F = 10\text{mA}$			1	V
C_{TOT}	Diode capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$			4	pF
trr	Reverse Recovery Time	$I_{rr} = 0.1 \times I_R, I_F = I_R = 10\text{mA}, R_L = 100\Omega$			4	ns

Typical Characteristics

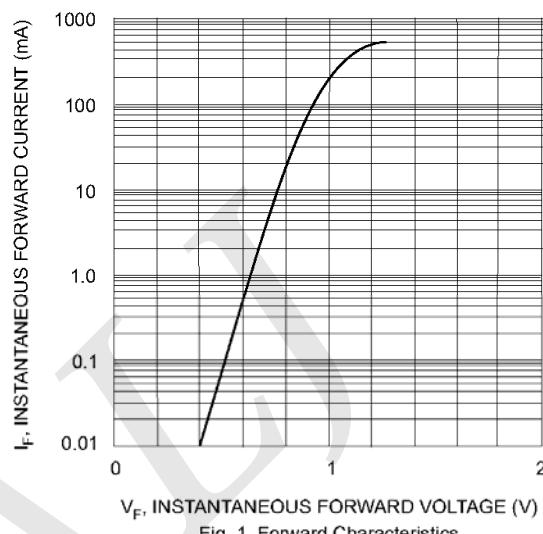


Fig. 1 Forward Characteristics

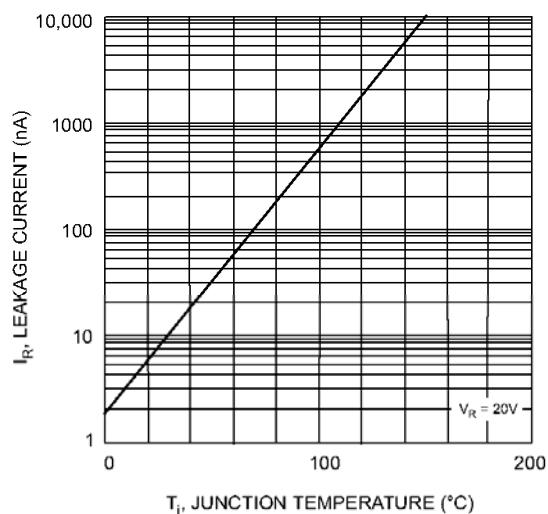


Fig. 2 Leakage Current vs Junction Temperature