



Micro Commercial Components



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1N914(A)(B)

Features

- Moisture Sensitivity Level 1
- Low Current Leakage
- Compression Bond Construction
- Low Cost
- Marking : Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

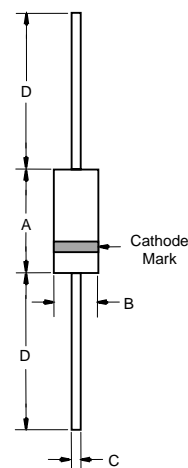
Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Repetitive Reverse Voltage	V_{RRM}	100V	
Average Rectified Forward Current	I_O	200mA	
Power Dissipation	P_D	500mW	
Junction Temperature	T_J	150°C	
Peak Forward Surge Current	I_{FSM}	1.0A 4.0A	Pulse Width=1.0 second Pulse Width=1.0 microsecond
Minimum Breakdown Voltage	V_R	100V 75V	$I_R=100\mu A$, $I_R=5.0\mu A$
Maximum Instantaneous Forward Voltage	V_F	1.0V 720mV	$T_J = 25^\circ C$ $I_{FM} = 10mA$; $I_{FM} = 20mA$; $I_{FM} = 100mA$; $I_{FM} = 5.0mA$;
Maximum Reverse Current	I_R	25nA 5.0μA 50μA	$V_R=20V$, $T_J=25^\circ C$, $V_R=75V$, $T_J=25^\circ C$, $V_R=20V$, $T_J=150^\circ C$
Typical Junction Capacitance	C_J	4.0pF	Measured at 1.0MHz, $V_R=0V$
Reverse Recovery Time	T_{rr}	4.0nS	$I_F=10mA$ $V_R = 6V$ $R_L=100 \Omega$, $I_{rr}=1.0mA$

*Pulse test: Pulse width 300 usec, Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

**500mW 100 Volt
Silicon Epitaxial
Diodes**

DO-35

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	



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Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

The graph shows the relationship between ambient temperature and admissible power dissipation for a single-phase half-wave 60Hz resistive or inductive load. The y-axis represents power dissipation in milliwatts (mW), ranging from 0 to 600. The x-axis represents ambient temperature in degrees Celsius (°C), ranging from 0 to 175. The power dissipation is constant at 500 mW for temperatures up to 25°C and then decreases linearly to 0 mW at 150°C.

Ambient Temperature (°C)	Admissible Power Dissipation (mW)
0	500
25	500
50	450
75	400
100	350
125	300
150	0

Graph showing Junction Capacitance (pF) versus Reverse Voltage (Volts) for $T_J = 25^\circ\text{C}$.

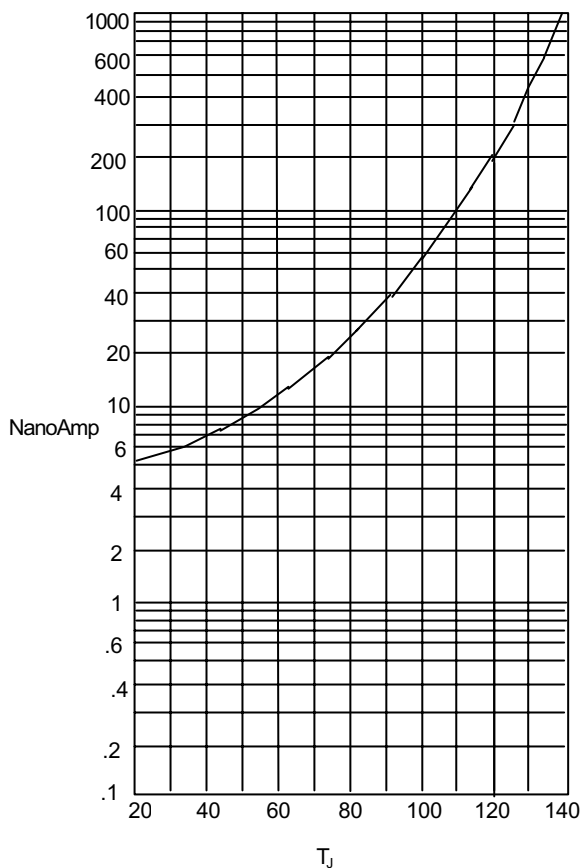
The Y-axis represents Junction Capacitance in pF, ranging from 0.1 to 10. The X-axis represents Reverse Voltage in Volts, ranging from 0.1 to 1000.

The curve indicates that the junction capacitance decreases as the reverse voltage increases, following a non-linear relationship.

Reverse Voltage (Volts)	Junction Capacitance (pF)
0.1	4.5
0.2	4.2
0.4	3.8
1.0	3.0
2.0	2.2
4.0	1.5
10.0	1.0

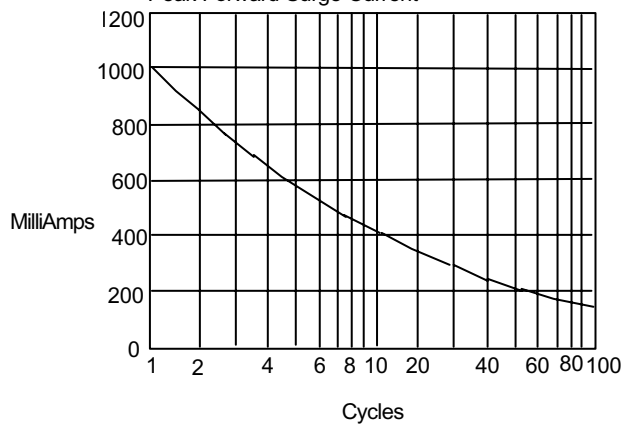
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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes
versus Junction Temperature $^{\circ}\text{C}$

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/AmmoBox
Part Number-BP	Bulk: 100Kpcs/Carton

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