

# 1N5920B-TP Datasheet

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DiGi Electronics Part Number	1N5920B-TP-DG
Manufacturer	<a href="#">Micro Commercial Co</a>
Manufacturer Product Number	1N5920B-TP
Description	DIODE ZENER 1.5W DO-41G
Detailed Description	Zener Diode 6.2 V 1.5 W ±5% Through Hole DO-41G

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## Purchase and inquiry

Manufacturer Product Number:

1N5920B-TP

Series:

-

Voltage - Zener (Nom) (Vz):

6.2 V

Power - Max:

1.5 W

Current - Reverse Leakage @ Vr:

5  $\mu$ A @ 4 V

Operating Temperature:

-55°C ~ 150°C

Package / Case:

DO-204AL, DO-41, Axial

Base Product Number:

1N5920

Manufacturer:

Micro Commercial Co

Product Status:

Obsolete

Tolerance:

$\pm$ 5%

Impedance (Max) (Zzt):

2 Ohms

Voltage - Forward (Vf) (Max) @ If:

1.2 V @ 200 mA

Mounting Type:

Through Hole

Supplier Device Package:

DO-41G

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.10.0050



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**1N5913B  
 THRU  
 1N5942B**

**1.5 Watt  
 Zener Diode  
 3.3 to 51 Volts**

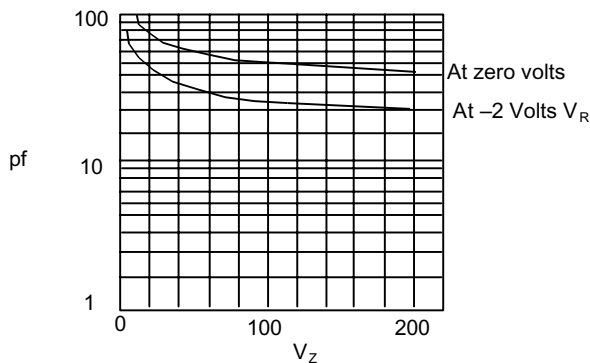
**Features**

- Wide Voltage Range Available
- Glass Package
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Marking : Cathode band and type number
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity Level 1

**Maximum Ratings**

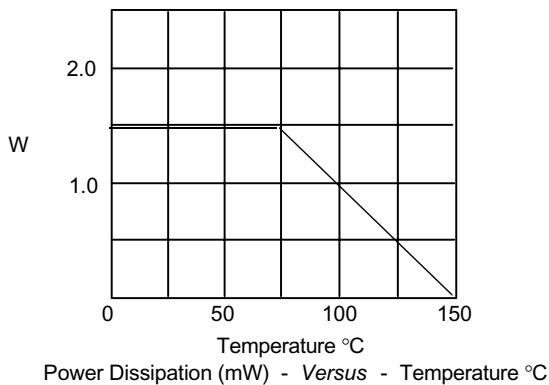
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- 1.5 Watt DC Power Dissipation
- Power Derating: 12 mW/°C above 75°C
- Forward Voltage @ 200mA: 1.2 Volts

Figure 1 - Typical Capacitance



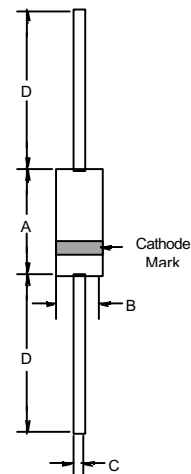
Typical Capacitance (pf) – versus – Zener voltage (V<sub>Z</sub>)

Figure 2 - Derating Curve



Power Dissipation (mW) - Versus - Temperature °C

DO-41G



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	-----	0.177	-----	4.50	
B	-----	0.110	-----	2.80	Diameter
C	0.026	0.034	0.70	0.90	Diameter
D	1.000	-----	25.40	-----	

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

## 1N5913B thru 1N5942B

**ELECTRICAL CHARACTERISTICS @25°C**

MCC PART NUMBER	ZENER VOLTAGE $V_Z$	TEST CURRENT $I_{ZT}$	MAXIMUM DYNAMIC IMPEDANCE $Z_{ZT}$ @ $I_{ZT}$	KNEE CURRENT $I_{ZK}$	KNEE IMPEDANCE $Z_{ZK}$	MAXIMUM REVERSE CURRENT $I_R$	REVERSE VOLTAGE $V_R$	MAXIMUM DC CURRENT $I_{ZM}$
	VOLTS	mA	OHMS	mA	OHMS	$\mu$ A	VOLTS	mA
1N5913B	3.3	113.6	10	1.0	500	100	1.0	454
1N5914B	3.6	104.2	9.0	1.0	500	75	1.0	416
1N5915B	3.9	96.1	7.5	1.0	500	25	1.0	384
1N5916B	4.3	87.2	6.0	1.0	500	5.0	1.0	348
1N5917B	4.7	79.8	5.0	1.0	500	5.0	1.5	319
1N5918B	5.1	73.5	4.0	1.0	350	5.0	2.0	294
1N5919B	5.6	66.9	2.0	1.0	250	5.0	3.0	267
1N5920B	6.2	60.5	2.0	1.0	200	5.0	4.0	241
1N5921B	6.8	55.1	2.5	1.0	200	5.0	5.2	220
1N5922B	7.5	50	3.0	0.5	400	5.0	6.0	200
1N5923B	8.2	45.7	3.5	0.5	400	5.0	6.5	182
1N5924B	9.1	41.2	4.0	0.5	500	5.0	7.0	164
1N5925B	10	37.5	4.5	0.25	500	5.0	8.0	150
1N5926B	11	34.1	5.5	0.25	550	1.0	8.4	125
1N5927B	12	31.2	6.5	0.25	550	1.0	9.1	125
1N5928B	13	28.8	7.0	0.25	550	1.0	9.9	115
1N5929B	15	25	9.0	0.25	600	1.0	11.4	100
1N5930B	16	23.4	10	0.25	600	1.0	12.2	93
1N5931B	18	20.8	12	0.25	650	1.0	13.7	83
1N5932B	20	18.7	14	0.25	650	1.0	15.2	75
1N5933B	22	17	17.5	0.25	650	1.0	16.7	68
1N5934B	24	15.6	19	0.25	700	1.0	18.2	62
1N5935B	27	13.9	23	0.25	700	1.0	20.6	55
1N5936B	30	12.5	28	0.25	750	1.0	22.8	50
1N5937B	33	11.4	33	0.25	800	1.0	25.1	45
1N5938B	36	10.4	38	0.25	850	1.0	27.4	41
1N5939B	39	9.6	45	0.25	900	1.0	29.7	38
1N5940B	43	8.7	53	0.25	950	1.0	32.7	34
1N5941B	47	8.0	67	0.25	1000	1.0	35.8	31
1N5942B	51	7.3	70	0.25	1100	1.0	38.8	29

**Note** 1: Suffix B indicates a 5% tolerance on nominal  $V_Z$ , Suffix C denotes a 2% tolerance.

2: Zener voltage( $V_Z$ ) measured at  $T_L = 30^\circ\text{C}$ . Voltage measurement to be performed 20 seconds after application of DC current.

3: The Zener impedance is derived from the 60 Hz ac voltage, which results when an ac current having an rms value equal to 10% of the DC Zener current( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed on  $I_{ZT}$  or  $I_{ZK}$ .



Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 2.5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

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