



Micro Commercial Components

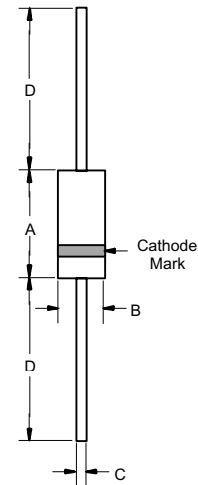


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**1N3821A  
 THRU  
 1N3828A**

**1.0 Watt  
 Zener Diode  
 3.3 to 6.2 Volts**

**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	-----	

**Features**

- Double Plug Construction
- Metallurgically Bound
- Marking: CathodeBand and Type Number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity Level 1

**Maximum Ratings & Thermal Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage at $I_F=200\text{mA}$	$V_F$	1.2	V
Power Dissipation at $T_L = 95^\circ\text{C}$	$P_{\text{tot}}$	1.0	W
Power Derating Above $T_L = 95^\circ\text{C}$		12.5	mW/°C
Operating Temperature	$T_j$	-65 ~ +175	°C
Storage Temperature Range	$T_{\text{STG}}$	-65 ~ +175	°C

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

# 1N3821A THRU 1N3828A



## ELECTRICAL CHARACTERISTICS @25°C

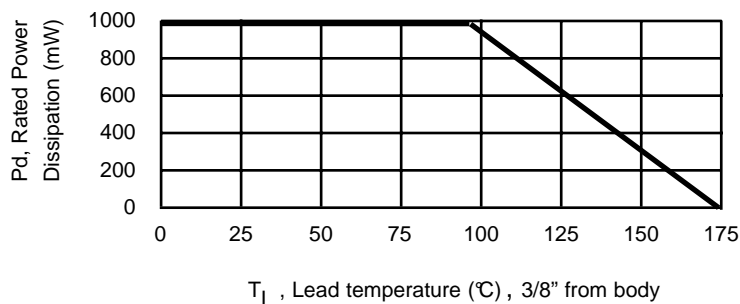
TYPE NUMBER	NOMINAL	TEST CURRENT	MAXIMUM ZENER IMPEDANCE		MAX. DC	MAX. REVERSE	
	ZENER				ZENER		
	VOLTAGE	IZT	ZZT @ IZT ZZK @ IZK=1mA		CURRENT	LEAKAGE CURRENT	
	VZ @ IZT		IZM	IR @ VR			
(NOTE 1)	(NOTE 3)	(NOTE 2)					
	VOLTS	mA	OHMS	OHMS	mA	μ A	VOLTS
1N3821A	3.3	76	10	400	276	100	1
1N43821C	3.3	76	10	400	276	100	1
1N3822A	3.6	69	10	400	252	75	1
1N3822C	3.6	69	10	400	252	75	1
1N3823A	3.9	64	9	400	238	25	1
1N3823C	3.9	64	9	400	238	25	1
1N3824A	4.3	58	9	400	213	5	1
1N3824C	4.3	58	9	400	213	5	1
1N3825A	4.7	53	8	500	194	5	1
1N3825C	4.7	53	8	500	194	5	1
1N3826A	5.1	49	7	550	178	3	1
1N3826C	5.1	49	7	550	178	3	1
1N3827A	5.6	45	5	600	162	3	2
1N3827C	5.6	45	5	600	162	3	2
1N3828A	6.2	41	2	700	146	3	3
1N3828C	6.2	41	2	700	146	3	3

**NOTE 1** suffix "A" = ± 5% tolerance on nominal Zener voltage, suffix "C" signifies ± 2%.

**NOTE 2** Zener impedance is derived by superimposing on  $I_{ZT}$  A 60Hz rms a.c. current equal to 10% of  $I_{ZT}$ .

**NOTE 3** Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of  $25°C \pm 3°C$ .

FIGURE 1



POWER DERATING CURVE

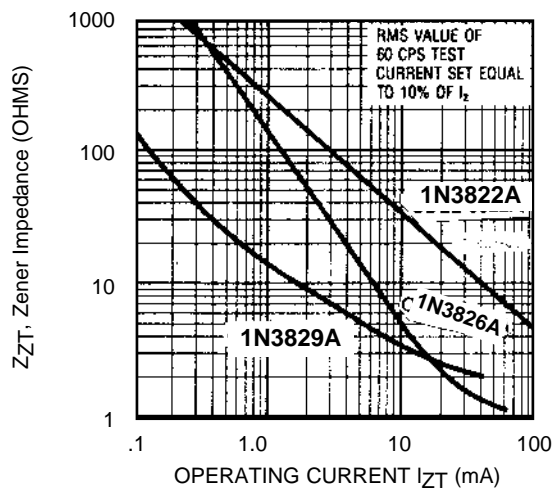


FIGURE 2  
ZENER IMPEDANCE VS. OPERATING CURRENT



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### 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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