



**Micro Commercial Components** 



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# 1N3821A THRU 1N3828A

## **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

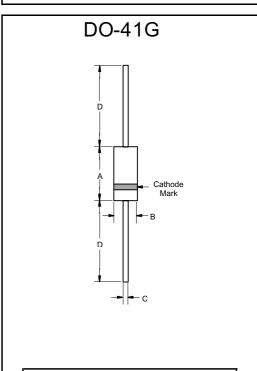
## **Maximum Ratings & Thermal Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage at I <sub>F</sub> =200mA	VF	1.2	V
Power Dissipation at T <sub>L</sub> = 95° C	$P_{tot}$	1.0	W
Power  Derating  Abrove $T_L = 95^{\circ}$ C		12.5	mW/°C
Operating Temperature	T <sub>j</sub>	-65 ~ +175	°C
Storage Temperature Range	T <sub>STG</sub>	-65 ~ +175	°C

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

1.0 Watt
Zener Diode
3.3 to 6.2 Volts



DIMENSIONS					
DIM	INCHES		ММ		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α		0.177		4.50	
В		0.110		2.80	Diameter
С	0.026	0.034	0.70	0.90	Diameter
D	1.000		25.40		

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### **ELECTRICAL CHARACTERISTICS @25°C**

	NOMINAL				MAX. DC	MAY D	EVED SE
TYPE NUMBER	ZENER	TEST CURRENT	MAXIMUM ZENER IMPEDANCE  ZZT @ IZT ZZK @ IZK=1mA		ZENER	MAX. REVERSE	
TIPE NUMBER	VOLTAGE				CURRENT	LEAKAGE CURRENT	
	VZ @ IZT	IZT			IZM	IR @ VR	
(NOTE 1)	(NOTE 3)		(NOTE 2)				
	VOLTS	mA	онмѕ	OHMS	mA	μ <b>Α</b>	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

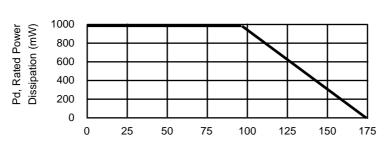
**NOTE 1** suffix "A" =± 5% tolerance on nominal Zener voltage, suffix "C" signifies ± 2%.

NOTE 2 Zener impedance is derived by superimposing on 1<sub>ZT</sub> A 60Hz rms a.c. current equal to 10% of 1<sub>ZT</sub>.

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







 $T_L$  , Lead temperature (°C) , 3/8" from body

#### **POWER DERATING CURVE**

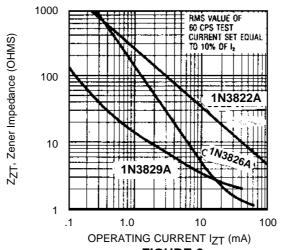


FIGURE 2
ZENER IMPEDANCE VS. OPERATING CURRENT



### **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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