



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

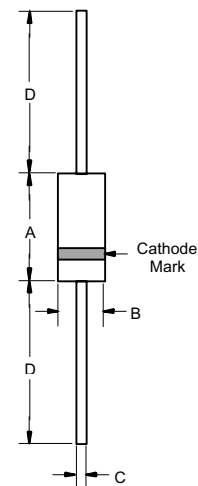
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage at $I_F=200\text{mA}$	V_F	1.2	V
Power Dissipation at $T_L = 95^\circ\text{C}$	P_{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_{STG}	-65 ~ +175	°C

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

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

DO-41G



DIM	INCHES		MM		NOTE
	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	-----	

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ELECTRICAL CHARACTERISTICS @25°C

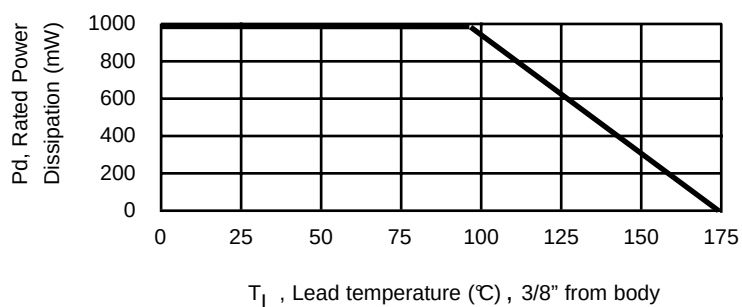
TYPE NUMBER	NOMINAL		MAXIMUM ZENER IMPEDANCE		MAX. DC	MAX. REVERSE	
	ZENER	TEST CURRENT			ZENER		
	VOLTAGE				CURRENT	LEAKAGE CURRENT	
	VZ @ IZT	IZT	ZZT @ IZT ZZK @ IZK=1mA		IZM	IR @ VR	
(NOTE 1)	(NOTE 3)		(NOTE 2)				
	VOLTS	mA	OHMS	OHMS	mA	μ A	VOLTS
1N3821	3.3	76	10	400	276	100	1
1N3821A	3.3	76	10	400	276	100	1
1N3822	3.6	69	10	400	252	75	1
1N3822A	3.6	69	10	400	252	75	1
1N3823	3.9	64	9	400	238	25	1
1N3823A	3.9	64	9	400	238	25	1
1N3824	4.3	58	9	400	213	5	1
1N3824A	4.3	58	9	400	213	5	1
1N3825	4.7	53	8	500	194	5	1
1N3825A	4.7	53	8	500	194	5	1
1N3826	5.1	49	7	550	178	3	1
1N3826A	5.1	49	7	550	178	3	1
1N3827	5.6	45	5	600	162	3	2
1N3827A	5.6	45	5	600	162	3	2
1N3828	6.2	41	2	700	146	3	3
1N3828A	6.2	41	2	700	146	3	3

NOTE 1 No suffix = $\pm 10\%$ tolerance on nominal Zener voltage, suffix "A" signifies $\pm 5\%$, suffix "C" signifies $\pm 2\%$.

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 $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

FIGURE 1



POWER DERATING CURVE

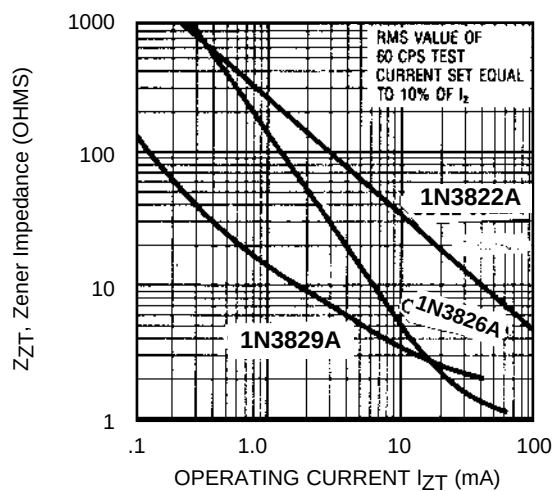


FIGURE 2
ZENER IMPEDANCE VS. OPERATING CURRENT



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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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