Micro Commercial Components

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1N3821A THRU 1N3828A

1.0 Watt Zener Diode 3.3 to 6.2 Volts

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

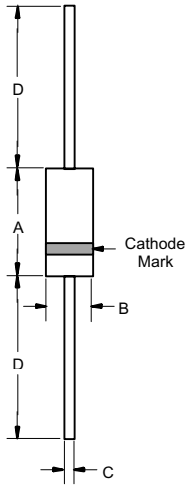
Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage at I_F=200mA	V_F	1.2	V
Power Dissipation at T_L = 95°C	P_{tot}	1.0	W
Power Derating Above T_L = 95°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.

DO-41G



DIMENSIONS					
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	-----	

ELECTRICAL CHARACTERISTICS @25°C

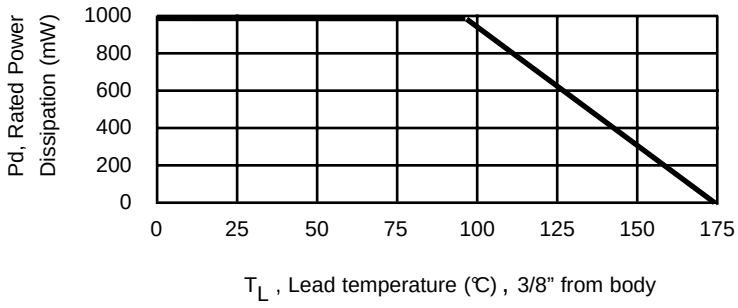
TYPE NUMBER	NOMINAL ZENER VOLTAGE	TEST CURRENT	MAXIMUM ZENER IMPEDANCE		MAX. DC ZENER CURRENT	MAX. REVERSE LEAKAGE CURRENT	
	VZ @ IZT	IZT	ZZT @ IZT	ZZK @ IZK=1mA	IZM	IR @ VR	
(NOTE 1)	(NOTE 3)		(NOTE 2)				
	VOLTS	mA	OHMS	OHMS	mA	μA	VOLTS
1N3821	3.3	76	10	400	276	100	1
1N3821A	3.3	76	10	400	276	100	1
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 = ± 10% tolerance on nominal Zener voltage, suffix “A” signifies ±5%, suffix “C” signifies ± 2%.

NOTE 2 Zener impedance is derived by superimposing on 1_{ZT} A 60Hz rms a.c. current equal to 10% of 1_{ZT}.

NOTE 3 Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25℃ ± 3℃.

FIGURE 1



POWER DERATING CURVE

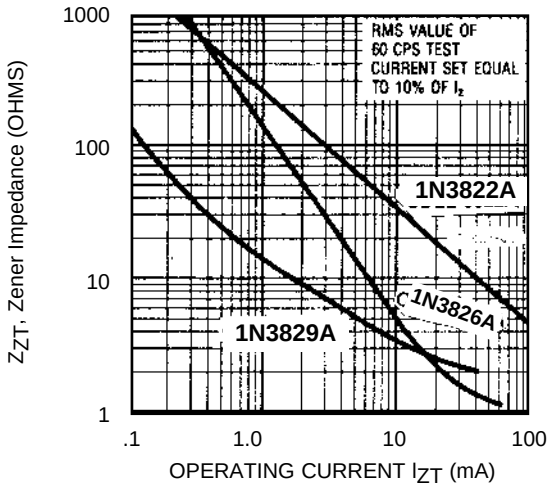


FIGURE 2

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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