



**SILICON PLANAR ZENER DIODE**

**FEATURES**

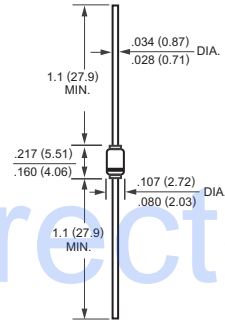
- \* Zener Voltage Range 3.3 to 56 Volts
- \* DO-41 Package (JEDEC)
- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



**DO-41**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS ( @ TA = 25°C unless otherwise noted )**

RATINGS	SYMBOL	VALUE	UNITS
Power Dissipation	P <sub>D</sub>	1000	mW
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +200	°C

Note: 1."Fully RoHS Compliant", "100% Sn Plating (Pb-free)".  
 2.Standard tolerance : Vz +/- 5%

2012-3  
Rev.A

## ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	V <sub>ZT</sub> @I <sub>ZT</sub> (Volts) Nominal	I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @I <sub>ZT</sub> (Ω) MAX	I <sub>ZK</sub> (mA)	Z <sub>Zk</sub> @I <sub>Zk</sub> (Ω) MAX	I <sub>R</sub> @V <sub>R</sub> (mA) MAX	V <sub>R</sub> (Volts)
1N4728A	3.3	76	10	1	400	100	1
1N4729A	3.6	69	10	1	400	100	1
1N4730A	3.9	64	9	1	400	50	1
1N4731A	4.3	58	9	1	400	10	1
1N4732A	4.7	53	8	1	500	10	1
1N4733A	5.1	49	7	1	550	10	1
1N4734A	5.6	45	5	1	600	10	2
1N4735A	6.2	41	2	1	700	10	3
1N4736A	6.8	37	3.5	1	700	10	4
1N4737A	7.5	34	4	0.5	700	10	5
1N4738A	8.2	31	4.5	0.5	700	10	6
1N4739A	9.1	28	5	0.5	700	10	7
1N4740A	10	25	7	0.25	700	10	7.6
1N4741A	11	23	8	0.25	700	5	8.4
1N4742A	12	21	9	0.25	700	5	9.1
1N4743A	13	19	10	0.25	700	5	9.9
1N4744A	15	17	14	0.25	700	5	11.4
1N4745A	16	15.5	16	0.25	700	5	12.2
1N4746A	18	14	20	0.25	700	5	13.7
1N4747A	20	12.5	22	0.25	750	5	15.2
1N4748A	22	11.5	23	0.25	750	5	16.7
1N4749A	24	10.5	25	0.25	750	5	18.2
1N4750A	27	9.5	35	0.25	750	5	20.6
1N4751A	30	8.5	40	0.25	1000	5	22.8
1N4752A	33	7.5	45	0.25	1000	5	25.1
1N4753A	36	7.0	50	0.25	1000	5	27.4
1N4754A	39	6.5	60	0.25	1000	5	29.7
1N4755A	43	6.0	70	0.25	1500	5	32.7
1N4756A	47	5.5	80	0.25	1500	5	35.8
1N4757A	51	5.0	95	0.25	1500	5	38.8
1N4758A	56	4.5	110	0.25	2000	5	42.6

## RATING AND CHARACTERISTICS CURVES ( 1N4728A-1N4758A )



Figure1 Power Dissipation vs Ambient Temperature



Figure2 Typical Thermal Resistance vs Lead Length

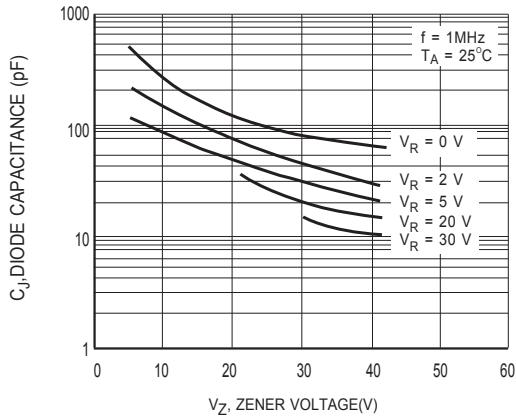


Figure3 Junction Capacitance vs Zener Voltage

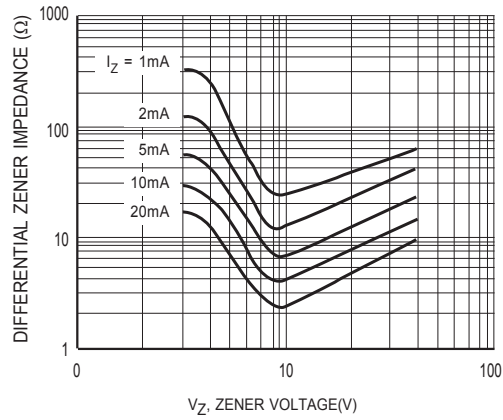


Figure4 Typical Zener Impedance vs Zener Voltage

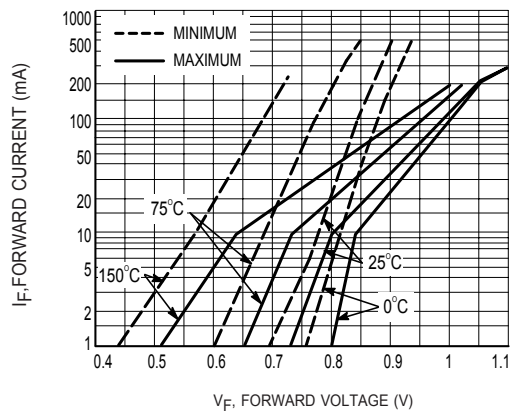


Figure5 Typical Forward Characteristics

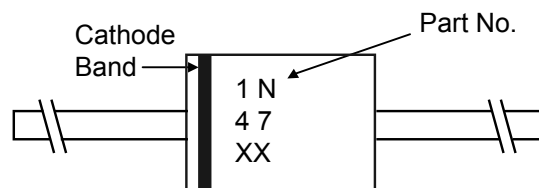


## Attachment information about 1N47XXA

### 1. Internal Circuit



### 2. Marking on the body



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