

DIGITRON SEMICONDUCTORS

1N3154(A) -1N3157(A)

TEMPERATURE COMPENSATED ZENER DIODES

MAXIMUM RATINGS

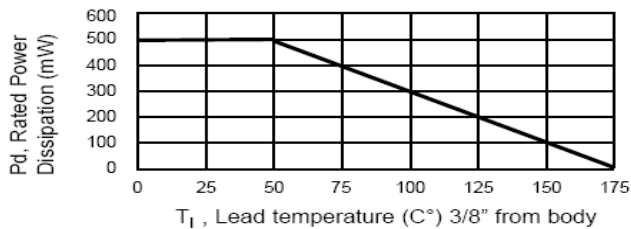
Operating Temperature	-65 to +175°C
Storage Temperature	-65 to +175°C
DC Power Dissipation	500 mW @ 50°C
Power Derating	4 mW/°C above 50°C
Reverse Leakage Current	$I_R = 10\mu A @ 25^\circ C \text{ \& } V_R = 5.5 \text{ Vdc}$

ELECTRICAL CHARACTERISTICS

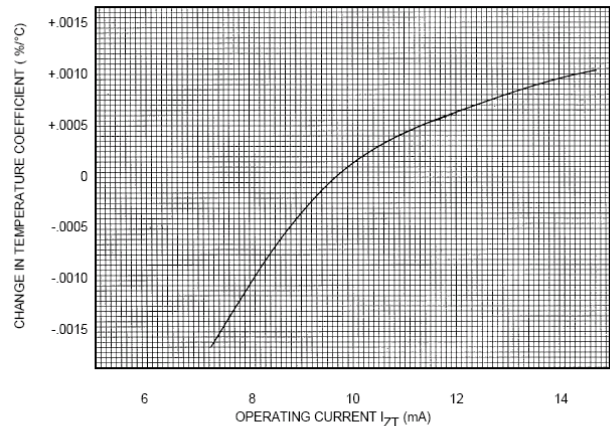
Type Number	Zener Voltage $V_Z @ I_{ZT}$	Zener Test Current I_{ZT}	Maximum Zener Impedance Z_{ZT} Note 1	Voltage Temperature Stability V_{ZT} maximum Note 2	Temperature Range	Effective Temperature Coefficient
	Volts	mA	Ohms	mV	°C	%/°C
1N3154	8.00-8.80	10	15	130	-55 to +100	.01
1N3154A	8.00-8.80	10	15	172	-55 to +150	.01
1N3155	8.00-8.80	10	15	65	-55 to +100	.005
1N3155A	8.00-8.80	10	15	86	-55 to +150	.005
1N3156	8.00-8.80	10	15	26	-55 to +100	.002
1N3156A	8.00-8.80	10	15	34	-55 to +150	.002
1N3157	8.00-8.80	10	15	13	-55 to +100	.001
1N3157A	8.00-8.80	10	15	17	-55 to +150	.001

Note 1: Zener impedance is derived by superimposing on I_{ZT} A 60 Hz rms ac current equal to 10% of I_{ZT} .

Note 2: The maximum allowable change observed over the entire temperature range. (The diode voltage will not exceed the specified mV at any discrete temperature between the established limits.



POWER DERATING CURVE

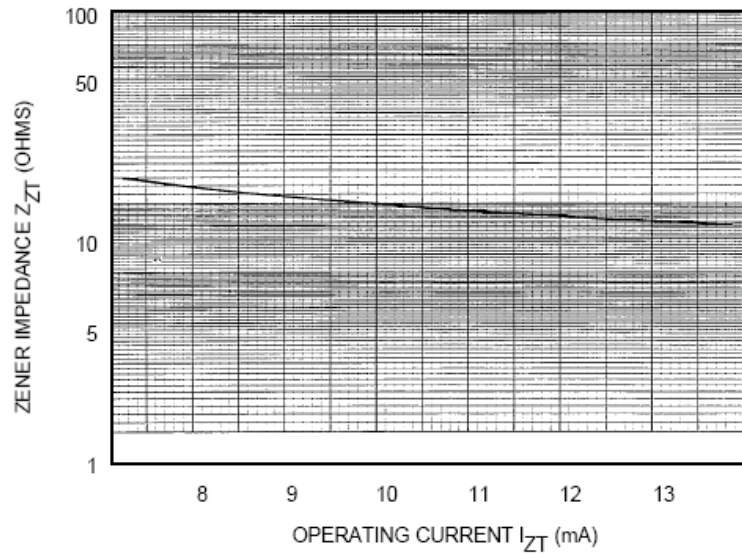


TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT

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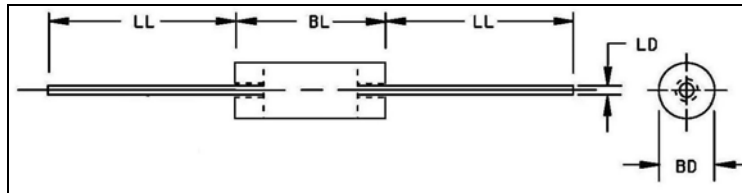
TEMPERATURE COMPENSATED ZENER DIODES



ZENER IMPEDANCE VS. OPERATING CURRENT

MECHANICAL CHARACTERISTICS

Case:	DO-35 hermetically sealed glass
Polarity:	Cathode band
Marking:	Body Painted, Alpha-Numeric



	Dimensions			
	1N3154(A) – 1N3157(A)			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix)

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number