



**FRONTIER  
ELECTRONICS CO., LTD.**

**1N4728A  
THRU  
1N4764A**

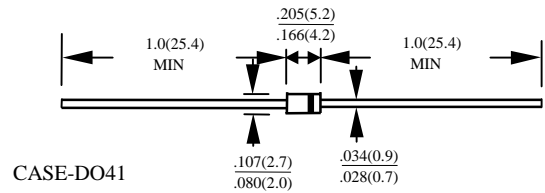
**1WATT ZENER DIODE**

**FEATURES**

- LOW COST
- SMALL SIZE

**MECHANICAL DATA**

- CASE : DO-41
- TERMINALS : AXIAL LEADS, SOLDERABLE PER MIL-STD -202 METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE
- MOUNTING POSITION : ANY
- WEIGHT : 0.34 GRAMS



DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS  
RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED  
STORAGE AND OPERATING TEMPERATURE RANGE -55 TO + 150°C

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED) VF=1.2V MAX, IF = 200mA FOR ALL TYPES

JEDEC TYPE NO	NOMINAL ZENER VOLTAGE V <sub>Z</sub> @ I <sub>ZT</sub> VOLTS	TEST CURRENT I <sub>ZT</sub> mA	MAXIMUM ZENER IMPEDANCE			LEAKAGE CURRENT		SURGE CURRENT @ TA=25°C I <sub>R</sub> -mA
			Z <sub>ZT</sub> @ I <sub>ZT</sub> OHMS	Z <sub>ZK</sub> @ I <sub>ZK</sub> OHMS	I <sub>ZK</sub> mA	I <sub>R</sub> µA MAX	V <sub>R</sub> VOLTS	
1N4728A	3.3	76	10	400	1	100	1	1380
1N4729A	3.6	69	10	400	1	100	1	1260
1N4730A	3.9	64	9	400	1	50	1	1190
1N4731A	4.3	58	9	400	1	10	1	1070
1N4732A	4.7	53	8	500	1	10	1	970
1N4733A	5.1	49	7	550	1	10	1	890
1N4734A	5.6	45	5	600	1	10	2	810
1N4735A	6.2	41	2	700	1	10	3	730
1N4736A	6.8	37	3.5	700	1	10	4	660
1N4737A	7.5	34	4	700	0.5	10	5	605
1N4738A	8.2	31	4.5	700	0.5	10	6	550
1N4739A	9.1	28	5	700	0.5	10	7	500
1N4740A	10	25	7	700	0.25	10	7.6	454
1N4741A	11	23	8	700	0.25	5	8.4	414
1N4742A	12	21	9	700	0.25	5	9.1	380
1N4743A	13	19	10	700	0.25	5	9.9	344
1N4744A	15	17	14	700	0.25	5	11.4	304
1N4745A	16	15.5	16	700	0.25	5	12.2	285
1N4746A	18	14	20	750	0.25	5	13.7	250
1N4747A	20	12.5	22	750	0.25	5	15.2	225
1N4748A	22	11.5	23	750	0.25	5	16.7	205
1N4749A	24	10.5	25	750	0.25	5	18.2	190
1N4750A	27	9.5	35	750	0.25	5	20.6	170
1N4751A	30	8.5	40	1000	0.25	5	22.8	150
1N4752A	33	7.5	45	1000	0.25	5	25.1	135
1N4753A	36	7	50	1000	0.25	5	27.4	125
1N4754A	39	6.5	60	1000	0.25	5	29.7	115
1N4755A	43	6	70	1500	0.25	5	32.7	110
1N4756A	47	5.5	80	1500	0.25	5	35.8	95
1N4757A	51	5	95	1500	0.25	5	38.8	90
1N4758A	56	4.5	110	2000	0.25	5	42.6	80
1N4759A	62	4	125	2000	0.25	5	47.1	70
1N4760A	68	3.7	150	2000	0.25	5	51.7	65
1N4761A	75	3.3	175	2000	0.25	5	56	60
1N4762A	82	3	200	3000	0.25	5	62.2	55
1N4763A	91	2.8	250	3000	0.25	5	69.2	50
1N4764A	100	2.5	350	3000	0.25	5	76	45

NOTE : SUFFIX "A" FOR ± 5%

# RATINGS AND CHARACTERISTIC CURVES 1N4728A THRU 1N4764A

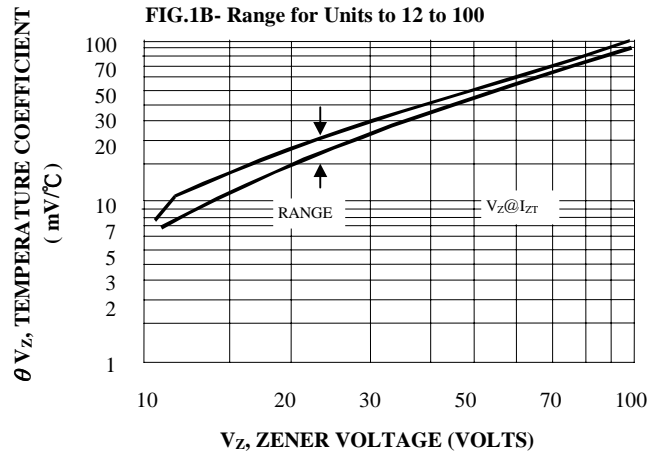
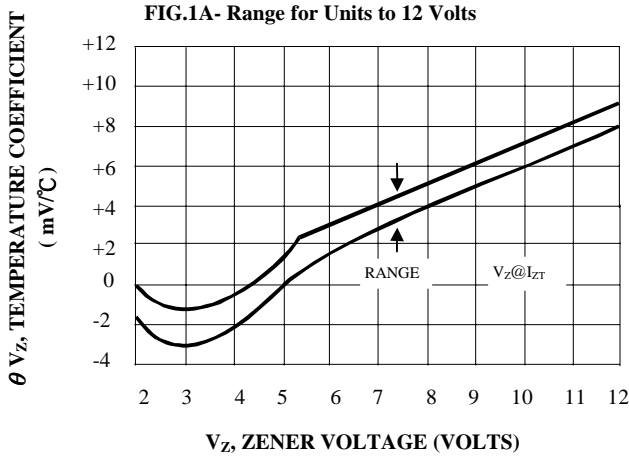


Figure 2. Temperature Coefficients (-55°C to +150°C temperature change; 90% of the units are in the ranges indicated.)

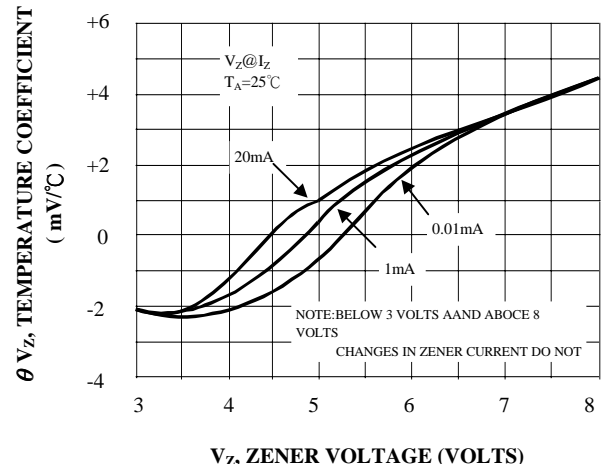
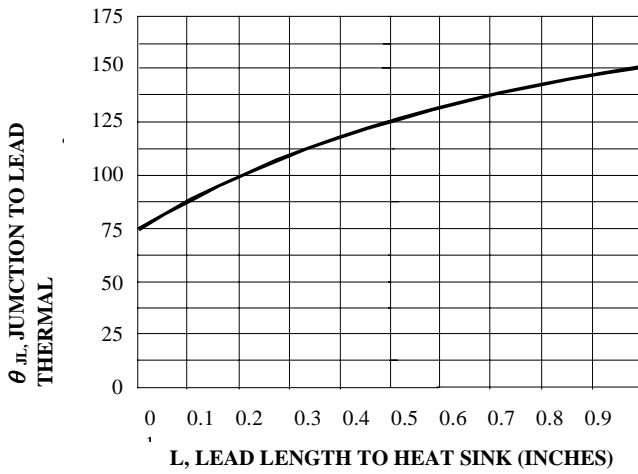


Figure 3. Typical Thermal Resistance versus Lead

Figure 4. Effect of Zener Current

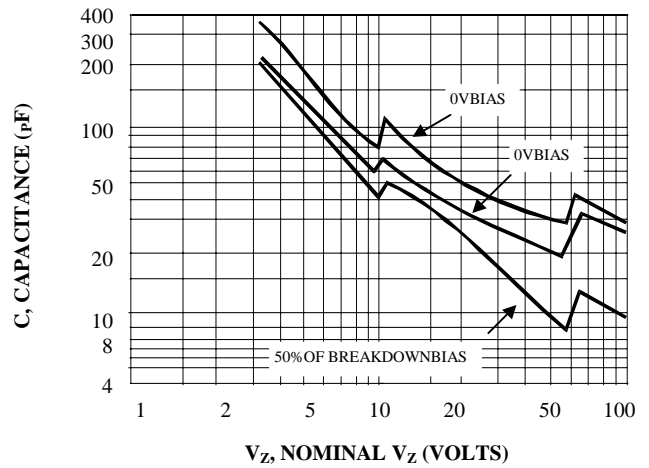
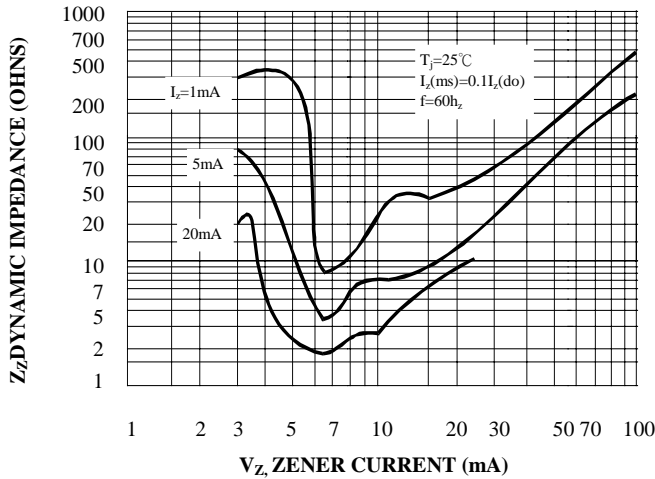


Figure 7 - Power Temperature Derating Curve

