

Features

- ◆ Glass passivated chip junction
- ◆ Low profile package
- ◆ Built-in strain relief
- ◆ Low inductance
- ◆ Typical I_R less than 5 μ A above 11V
- ◆ RoHS Compliant

Mechanical Data

- ◆ Case: DO-204AL (DO-41)
- ◆ Molding compound meets UL 94V-0 flammability rating
- ◆ Terminal: Pure tin plated leads, solderable per J-STD-002
- ◆ Polarity: Indicated by cathode band
- ◆ Weight: 0.300g (approximately)



Dimensions (DO-204AL/ DO-41)

Symbol	Dimension			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	4.20	5.20	0.165	0.205
C	0.71	0.86	0.028	0.034
D	2.00	2.70	0.079	0.106

Maximum Ratings (T_A=25°C Unless otherwise specified)

Parameter	Symbol	Value	Unit
Power dissipation at T _A = 50°C	P _{tot}	1	W
Derate above 50°C(1)		6.67	mW/°C
Operating junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Note: (1)Mounted on Cu-Pad size 5mm x 5mm

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	Zener Voltage Range			Test current	Zener Impedance			Maximum Reverse Current		Surge current
	$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		I_R	@ V_R	I_R
	Min (V)	Nom (V)	Max (V)	mA	Ω	Ω	mA	μA	V	mA
1N4740A	9.50	10	10.50	25.0	7	700	0.25	10	7.6	454
1N4741A	10.45	11	11.55	23.0	8	700	0.25	5	8.4	414
1N4742A	11.40	12	12.60	21.0	9	700	0.25	5	9.1	380
1N4743A	12.35	13	13.65	19.0	10	700	0.25	5	9.9	344
1N4744A	14.25	15	15.75	17.0	14	700	0.25	5	11.4	304
1N4745A	15.20	16	16.80	15.5	16	700	0.25	5	12.2	285
1N4746A	17.10	18	18.90	14.0	20	750	0.25	5	13.7	250
1N4747A	19.00	20	21.00	12.5	22	750	0.25	5	15.2	225
1N4748A	20.90	22	23.10	11.5	23	750	0.25	5	16.7	205
1N4749A	22.80	24	25.20	10.5	25	750	0.25	5	18.2	190
1N4750A	25.65	27	28.35	9.5	35	750	0.25	5	20.6	170
1N4751A	28.50	30	31.50	8.5	40	1000	0.25	5	22.8	150
1N4752A	31.35	33	34.65	7.5	45	1000	0.25	5	25.1	135
1N4753A	34.20	36	37.80	7.0	50	1000	0.25	5	27.4	125
1N4754A	37.05	39	40.95	6.5	60	1000	0.25	5	29.7	115
1N4755A	40.85	43	45.15	6.0	70	1500	0.25	5	32.7	110
1N4756A	44.65	47	49.35	5.5	80	1500	0.25	5	35.8	95
1N4757A	48.45	51	53.55	5.0	95	1500	0.25	5	38.8	90
1N4758A	53.20	56	58.80	4.5	110	2000	0.25	5	42.6	80
1N4759A	58.90	62	65.10	4.0	125	2000	0.25	5	47.1	70
1N4760A	64.60	68	71.40	3.7	150	2000	0.25	5	51.7	65
1N4761A	71.25	75	78.75	3.3	175	2000	0.25	5	56.0	60
1N4762A	77.90	82	86.10	3.0	200	3000	0.25	5	62.2	55
1N4763A	86.45	91	95.55	2.8	250	3000	0.25	5	69.2	50
1N4764A	95.00	100	105.00	2.5	350	3000	0.25	5	76.0	45
1M110Z	104.50	110	115.50	2.3	450	4000	0.25	5	83.6	-
1M120Z	114.00	120	126.00	2.0	550	4500	0.25	5	91.2	-
1M130Z	123.50	130	136.50	1.9	700	5000	0.25	5	98.8	-
1M150Z	142.50	150	157.50	1.7	1000	6000	0.25	5	114.0	-
1M160Z	152.00	160	168.00	1.6	1100	6500	0.25	5	121.6	-
1M180Z	171.00	180	189.00	1.4	1200	7000	0.25	5	136.8	-
1M200Z	190.00	200	210.00	1.2	1500	8000	0.25	5	152.0	-

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Figure 1. Power Derating Curve

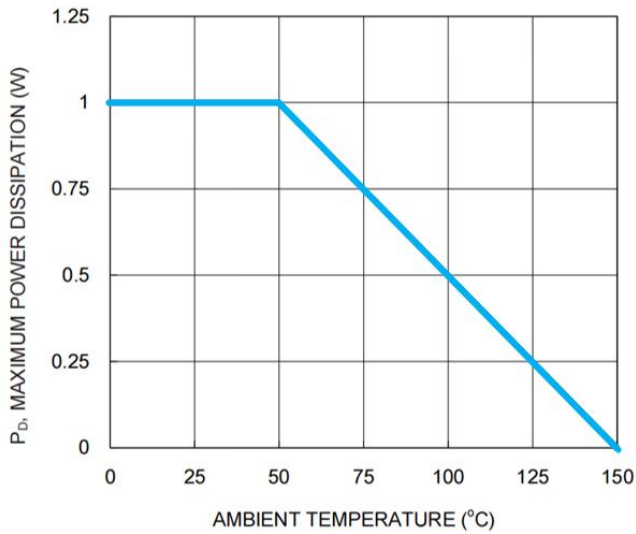


Figure 2. Typical Forward Characteristics

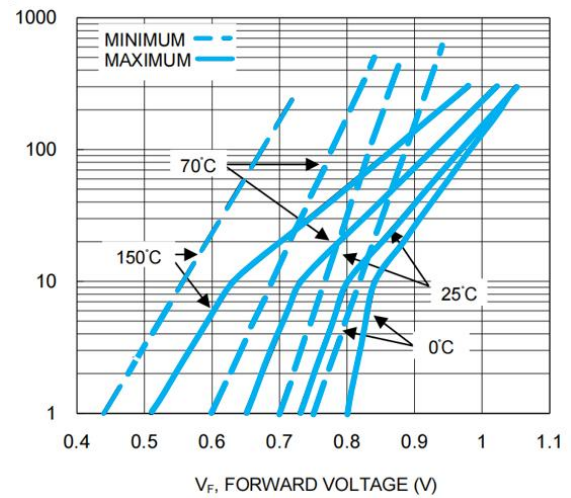


Figure 3. Effect of Zener Current On Zener impedance

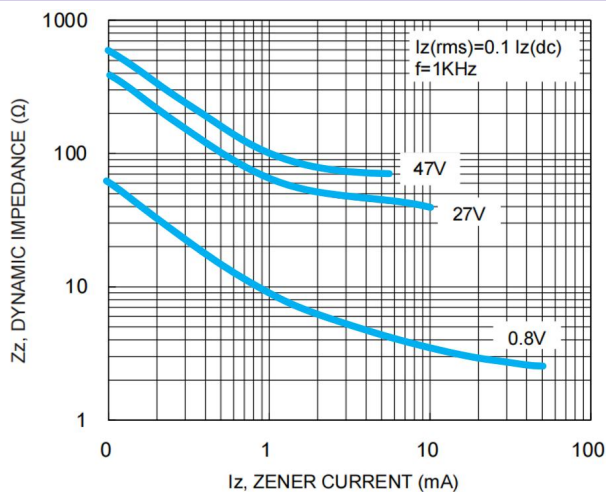


Figure 4. Effect of Zener Voltage On Zener Impedance

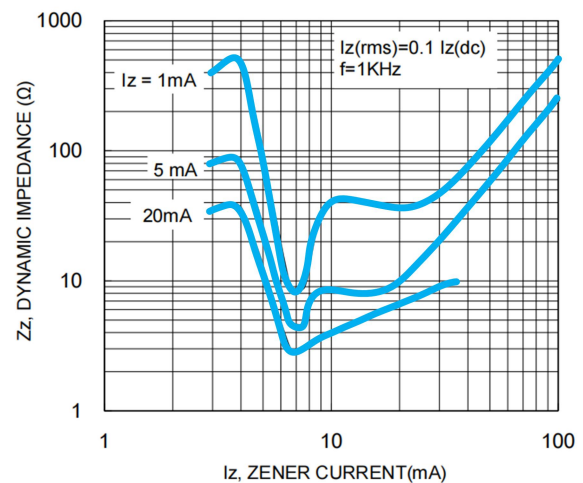


Figure 5. Typical Leakage Current

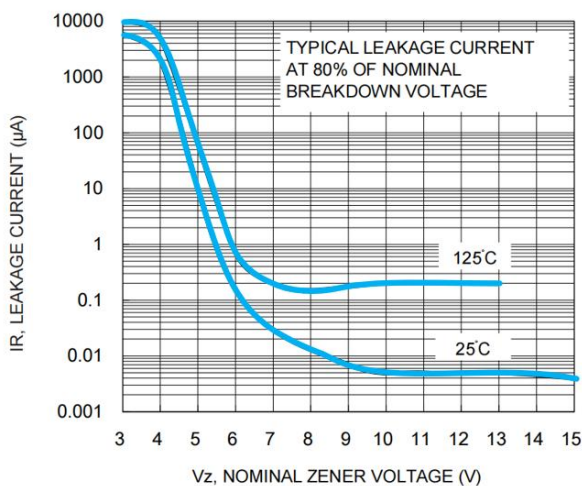
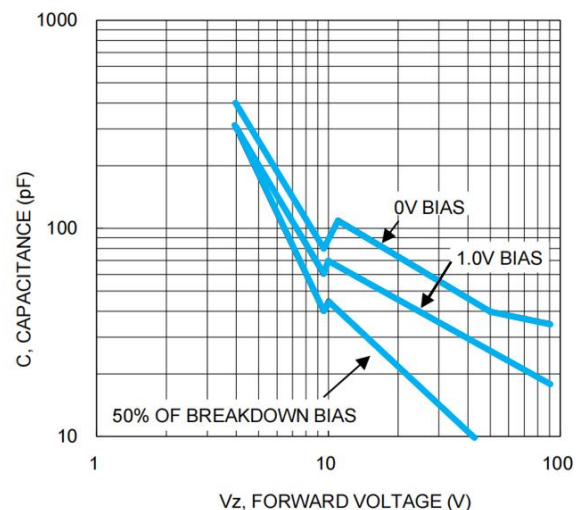
Figure 6. Typical Capacitance versus V_z 

Figure 7. Temperature Coefficients

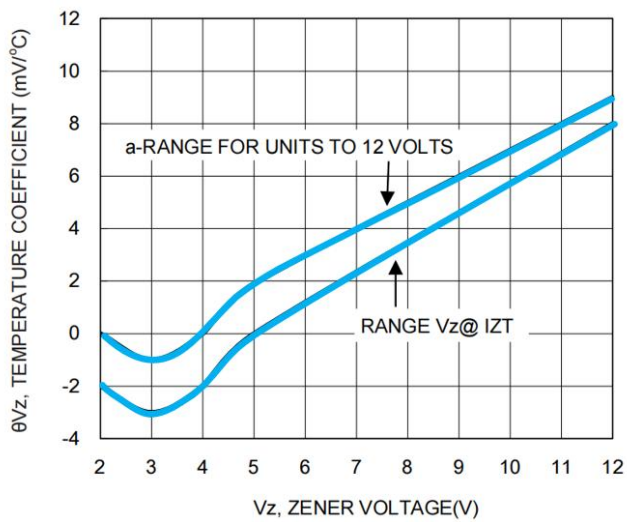


Figure 8. Temperature Coefficients

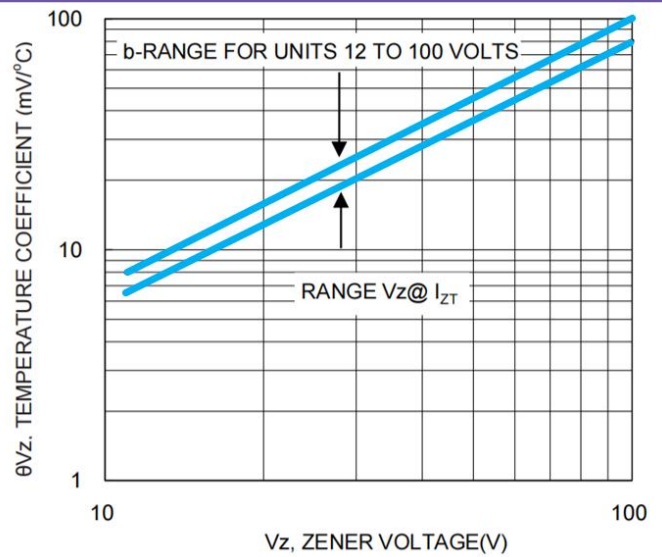


Figure 9. Effect Of Zener Current

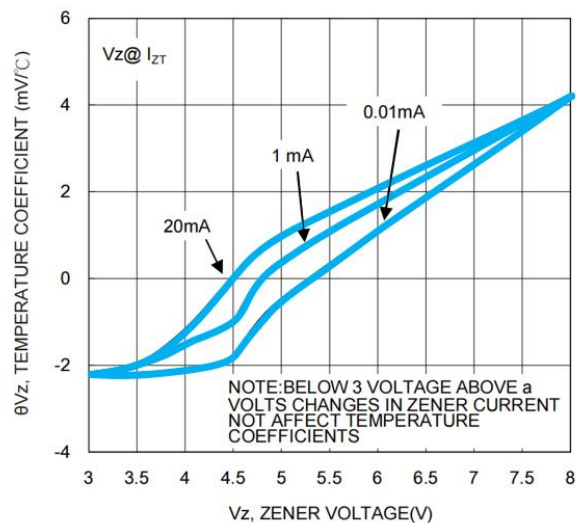


Figure 10. Typical Thermal Resistance versus Lead Length

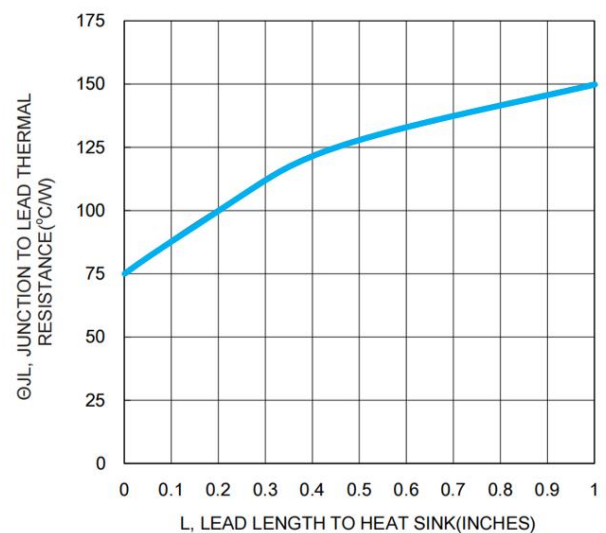
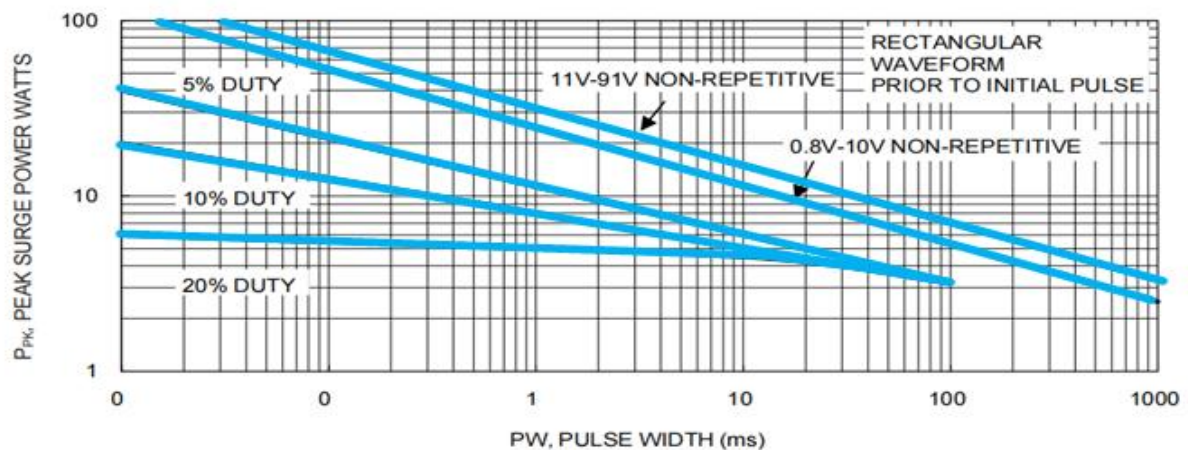


Figure 11. Maximum Surge Power



Wave Soldering Parameters

