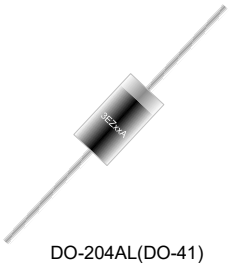
WZ3EZxxAD1

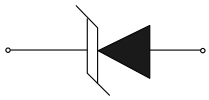
Silicon Zener Diodes

Features

- Built-in Strain relief
- Low inductance
- High peak reverse power dissipation
- Low reverse leakages
- For use in stabilizing and clipping with high Power rating
- MSL: Level 1



DO-204AL(DO-41)



Unidirectional

Mechanical Characteristics

- DO-204AL(DO-41) package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel
- RoHS & HF Compliant

Applications

- I/O Interfaces
- Power lines
- Telecommunication
- Computers &Consumer Electronics
- Industrial Electronics

Absolute Maximum Rating (T_A=25℃ unless otherwise noted)

Rating	Symbol	Value	Units
DC Power dissipation at TL = 75 °C(1)	P_D	3.0	W
Maximum forward voltage at if=200mA	V_F	1.2	V
Junction temperature range	T_J	-55 to +150	℃
Storage temperature range	T_{STG}	-55 to +150	℃

Note1: T_L=Lead temperature at 3/8" (9.5mm)from body.

Features (T_A=25℃ unless otherwise noted)

Part Number	Nominal Zener Voltage @IZT			IZT(mA)	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	$V_{Z\ AVE.}$(V)	$V_{Z\ MIN.}$(V)	$V_{Z\ MAX.}$(V)		$Z_{ZT\ MAX.}$(Ω) @I_{ZT}	$Z_{ZK\ MAX.}$(Ω) @I_{ZK}	I_{ZK}(mA)	I_R(uA) @V_R	V_R(V)	I_{ZM}(mA)
WZ3EZ3.3AD1	3.3	3.14	3.47	227.3	10.0	500	1.00	100	1.0	817.0
WZ3EZ3.6AD1	3.6	3.42	3.78	208.3	9.0	500	1.00	100	1.0	749.0
WZ3EZ3.9AD1	3.9	3.71	4.10	192.0	4.5	400	1.00	100	1.0	691.0
WZ3EZ4.3AD1	4.3	4.09	4.52	174.0	4.5	400	1.00	50	1.0	627.0
WZ3EZ4.7AD1	4.7	4.47	4.94	160.0	4.0	500	1.00	50	1.0	573.0
WZ3EZ5.1AD1	5.1	4.85	5.36	147.0	3.5	550	1.00	10.0	1.0	528.0
WZ3EZ5.6AD1	5.6	5.32	5.88	134.0	2.5	600	1.00	10.0	2.0	481.0
WZ3EZ6.2AD1	6.2	5.89	6.51	121.0	1.5	700	1.00	10.0	3.0	435.0
WZ3EZ6.8AD1	6.8	6.46	7.14	110.0	2.0	700	1.00	10.0	4.0	393.0
WZ3EZ7.5AD1	7.5	7.13	7.88	100.0	2.0	700	0.50	10.0	5.0	360.0
WZ3EZ8.2AD1	8.2	7.79	8.61	91.0	2.3	700	0.50	10.0	6.0	330.0
WZ3EZ9.1AD1	9.1	8.65	9.56	82.0	2.5	700	0.50	10.0	7.0	297.0
WZ3EZ10AD1	10.0	9.50	10.50	75.0	3.5	700	0.25	10.0	7.6	270.0
WZ3EZ11AD1	11.0	10.45	11.55	68.0	4.0	700	0.25	0.5	8.4	225.0
WZ3EZ12AD1	12.0	11.40	12.60	63.0	4.5	700	0.25	0.5	9.1	246.0
WZ3EZ13AD1	13.0	12.35	13.65	58.0	4.5	700	0.25	0.5	9.9	208.0
WZ3EZ14AD1	14.0	13.30	14.70	53.0	5.0	700	0.25	0.5	10.6	193.0
WZ3EZ15AD1	15.0	14.25	15.75	50.0	5.5	700	0.25	0.5	11.4	180.0
WZ3EZ16AD1	16.0	15.20	16.80	47.0	5.5	700	0.25	0.5	12.2	169.0
WZ3EZ17AD1	17.0	16.15	17.85	44.0	6.0	750	0.25	0.5	13.0	159.0
WZ3EZ18AD1	18.0	17.10	18.90	42.0	6.0	750	0.25	0.5	13.7	150.0
WZ3EZ19AD1	19.0	18.05	19.95	40.0	7.0	750	0.25	0.5	14.4	142.0
WZ3EZ20AD1	20.0	19.00	21.00	37.0	7.0	750	0.25	0.5	15.2	135.0
WZ3EZ22AD1	22.0	20.90	23.10	34.0	8.0	750	0.25	0.5	16.7	123.0
WZ3EZ24AD1	24.0	22.80	25.20	31.0	9.0	750	0.25	0.5	18.2	112.0
WZ3EZ27AD1	27.0	25.65	28.35	28.0	10.0	750	0.25	0.5	20.6	100.0
WZ3EZ30AD1	30.0	28.50	31.50	25.0	16.0	1000	0.25	0.5	22.5	90.0
WZ3EZ33AD1	33.0	31.35	34.65	23.0	20.0	1000	0.25	0.5	25.1	82.0
WZ3EZ36AD1	36.0	34.20	37.80	21.0	22.0	1000	0.25	0.5	27.4	75.0
WZ3EZ39AD1	39.0	37.05	40.95	19.0	28.0	1000	0.25	0.5	29.7	69.0
WZ3EZ43AD1	43.0	40.85	45.15	17.0	33.0	1500	0.25	0.5	32.7	63.0
WZ3EZ47AD1	47.0	44.65	49.35	16.0	38.0	1500	0.25	0.5	35.6	57.0
WZ3EZ51AD1	51.0	48.45	53.55	15.0	45.0	1500	0.25	0.5	38.8	53.0

Typical Characteristics

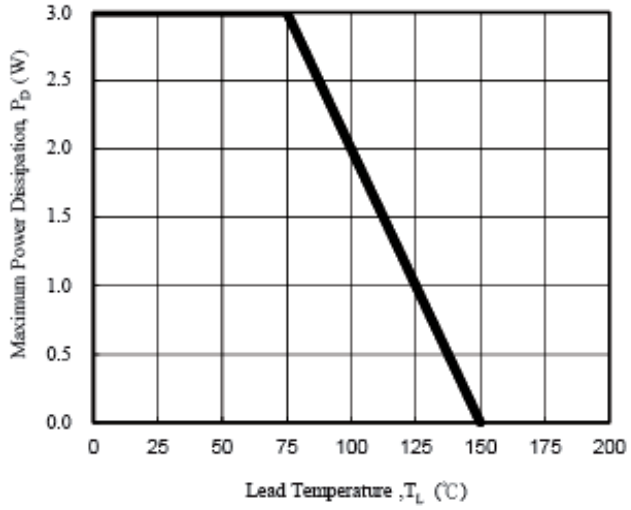


Fig. 1 - Power Temperature Derating Curve

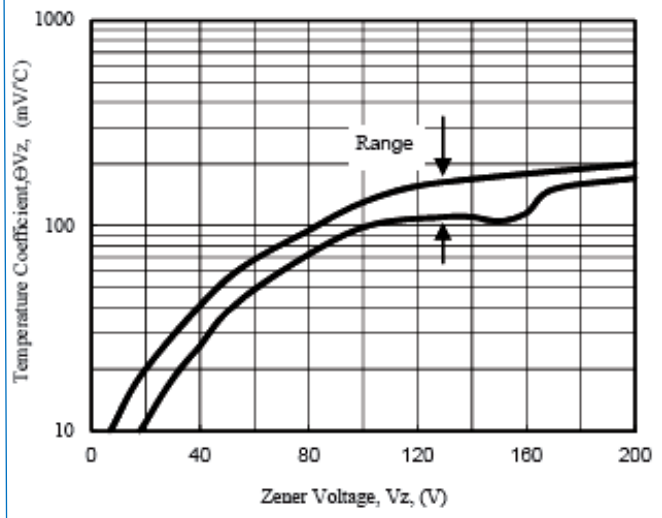


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

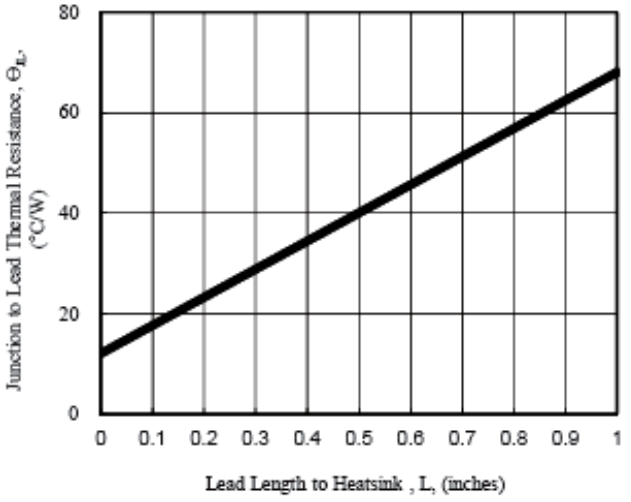


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

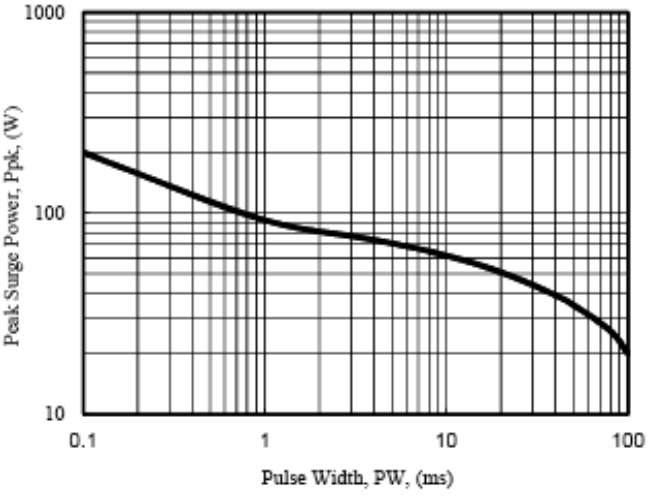


Fig. 4 - Maximum Surge Power

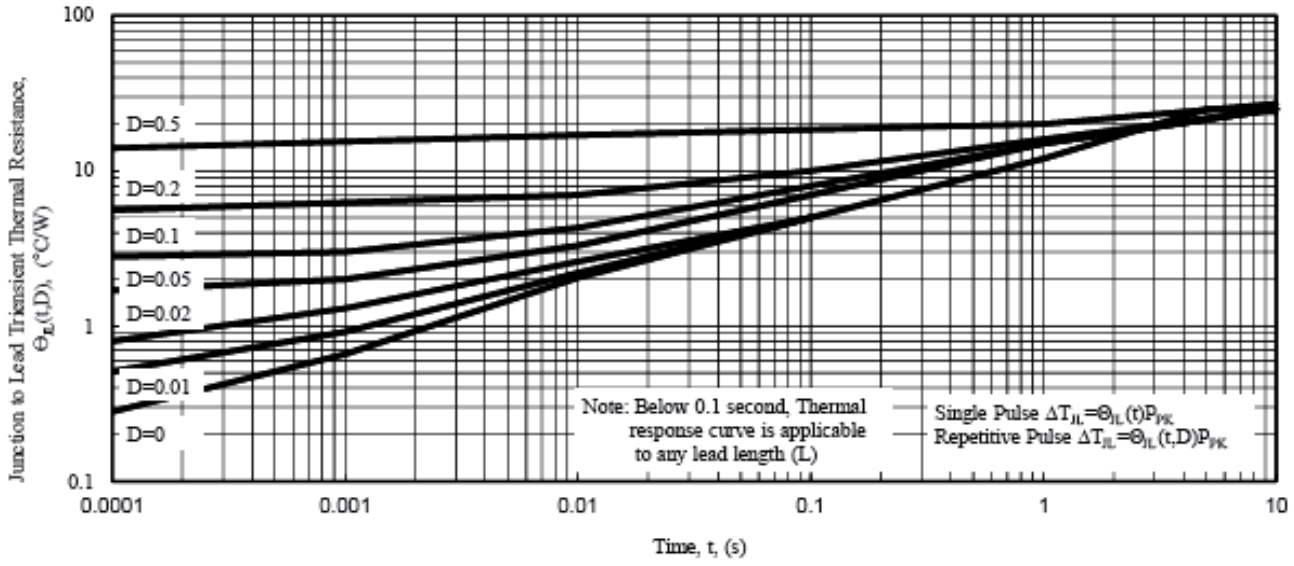
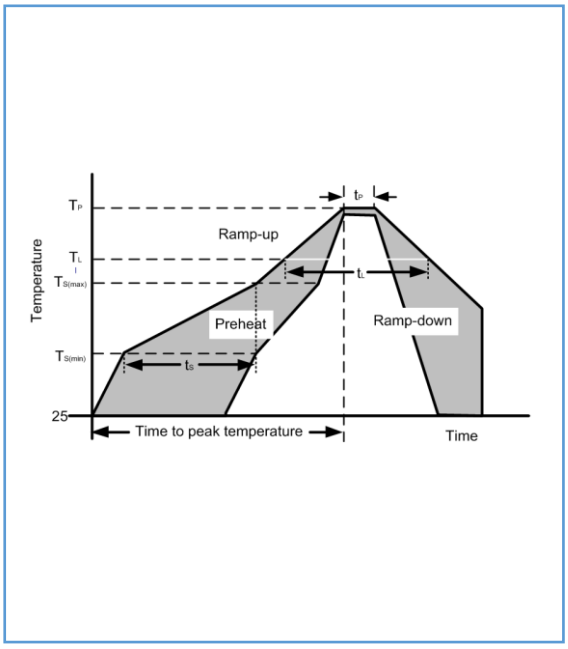


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

Note: The above typical parameters or typical characteristics are only indicative and do not make specific guarantees. If detailed values are required, additional communication and provision are required.

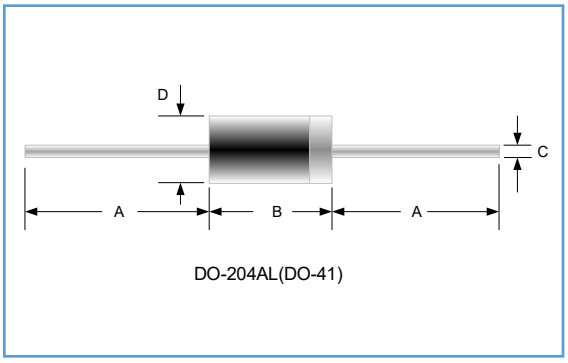
Recommended Soldering Parameters

Reflow Condition		
Pre-Heat	Temperature min ($T_{s(min)}$)	150°C
	Temperature max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60-190 s
Average ramp up rate (Liquidus Temp) (T_L) to peak		3°C/s max
Ts(max) to TL - Ramp-up Rate		3°C/s max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Temperature (t_L)	60-150 s
Peak Temperature (T_P)		$260^{+0/-5}$ °C
Time within actual peak Temperature (t_p)		20-40 s
Ramp-down Rate		5°C/s max
Time 25°C to peak Temperature (T_P)		8 minutes max
Do not exceed		260°C



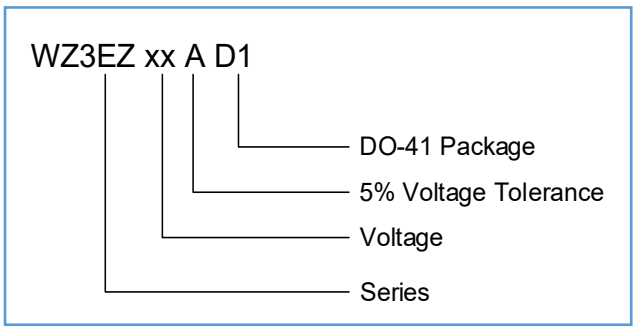
Outline Drawing – DO-204AL(DO-41)

Ref.（mm）	Millimeters	
	Min.	Max.
A	25.40	-
B	4.10	5.20
C	0.71	0.86
D	2.00	2.70

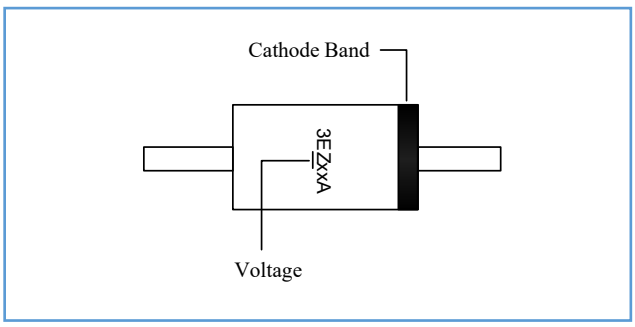


DO-204AL(DO-41)

Part Numbering System



Part Marking System



Package Information

Package Type	Description	Quantity（pcs）
DO-204AL(DO-41)	Tape & Box	3000

Contact Information

No.1001, Shiwan(7) Road, Pudong District, Shanghai, P.R.China.201207
Tel: 86-21-50310888 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: http://www.way-on.com
For additional information, please contact your local Sales Representative.
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Product Specification Statement

1.The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

2.The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.

3.WAYON strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, WAYON cannot guarantee that the information provided in the product specification is entirely accurate and error-free. WAYON shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications. WAYON reserves the right to revise or update the product specification and the products at any time without prior notice, and the user's continued use of the product specification is considered an acceptance of these revisions and updates. Prior to purchasing and using the product, users should verify the above information with WAYON to ensure that the product specification is the most current, effective, and complete. If users are particularly concerned about product parameters, please consult WAYON in detail or request relevant product test reports. Any data not explicitly mentioned in the product specification shall be subject to separate agreement.

4.Users are advised to pay attention to the parameter limit values specified in the product specification and maintain a certain margin in design or application to ensure that the product does not exceed the parameter limit values defined in the product specification. This precaution should be taken to avoid exceeding one or more of the limit values, which may result in permanent irreversible damage to the product, ultimately affecting the quality and reliability of the system or equipment.

5.The design of the product is intended to meet civilian needs and is not guaranteed for use in harsh environments or precision equipment. It is not recommended for use in systems or equipment such as medical devices, aircraft, nuclear power, and similar systems, where failures in these systems or equipment could reasonably be expected to result in personal injury. WAYON shall assume no responsibility for any consequences resulting from such usage.

6.Users should also comply with relevant laws, regulations, policies, and standards when using the product specification. Users are responsible for the risks and liabilities arising from the use of the product specification and must ensure that it is not used for illegal purposes. Additionally, users should respect the intellectual property rights related to the product specification and refrain from infringing upon any third-party legal rights. WAYON shall assume no responsibility for any disputes or controversies arising from the above-mentioned issues in any form.