

# GDZJ2.0~GDZJ56

## AXIAL LEAD ZENER DIODES

**VOLTAGE** 2.0 to 56 Volt

**POWER** 500 mWatt

**DO-34**

Unit : inch(mm)

### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directives

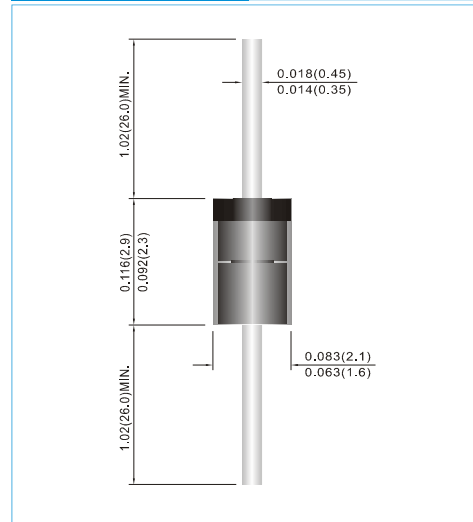
### MECHANICAL DATA

- Case: Molded Glass DO-34
- Terminals: Solderable per MIL-STD-750, Method 2026
- Packing information

B/P - 2K per Bulk box

T/R - 10K per 15" Reel

T/B - 5K per horiz. tape & Ammo box



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Power Dissipation on T <sub>A</sub> =25°C	P <sub>TOT</sub>	500	mW
Operating Junction Temperature Range	T <sub>J</sub>	175	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 175	°C
Valid provided that leads at a distance of 10mm from case are kept at ambient perature.			

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance	R <sub>θJA</sub>	-	-	0.3	°C/mW
Forward Voltage at I <sub>F</sub> =100mA	V <sub>F</sub>	-	-	1	V
Valid provided that leads at a distance of 10mm from case are kept at ambient perature.					

# GDZJ2.0~GDZJ56

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	Vz @ IzT			ZzT @ IzT		Zzk @ Izk		Ir @ VR		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
500 mW Zener Diodes										
GDZJ 2.0A	2	1.88	2.1	100	5	1000	0.5	120	0.5	Z2A0
GDZJ 2.0B	2	2.02	2.2	100	5	1000	0.5	120	0.5	Z2B0
GDZJ 2.2A	2.2	2.12	2.3	100	5	1000	0.5	120	0.7	Z2A2
GDZJ 2.2B	2.2	2.22	2.41	100	5	1000	0.5	120	0.7	Z2B2
GDZJ 2.4A	2.4	2.33	2.52	100	5	1000	0.5	120	1	Z2A4
GDZJ 2.4B	2.4	2.43	2.63	100	5	1000	0.5	120	1	Z2B4
GDZJ 2.7A	2.7	2.54	2.75	110	5	1000	0.5	120	1	Z2A7
GDZJ 2.7B	2.7	2.69	2.91	110	5	1000	0.5	120	1	Z2B7
GDZJ 3.0A	3.0	2.85	3.07	120	5	1000	0.5	50	1	Z3A0
GDZJ 3.0B	3.0	3.01	3.22	120	5	1000	0.5	50	1	Z3B0
GDZJ 3.3A	3.3	3.16	3.38	120	5	1000	0.5	20	1	Z3A3
GDZJ 3.3B	3.3	3.32	3.53	120	5	1000	0.5	20	1	Z3B3
GDZJ 3.6A	3.6	3.46	3.69	100	5	1000	1	10	1	Z3A6
GDZJ 3.6B	3.6	3.6	3.84	100	5	1000	1	10	1	Z3B6
GDZJ 3.9A	3.9	3.74	4.01	100	5	1000	1	5	1	Z3A9
GDZJ 3.9B	3.9	3.89	4.16	100	5	1000	1	5	1	Z3B9
GDZJ 4.3A	4.3	4.04	4.29	100	5	1000	1	5	1	Z4A3
GDZJ 4.3B	4.3	4.17	4.43	100	5	1000	1	5	1	Z4B3
GDZJ 4.3C	4.3	4.3	4.57	100	5	1000	1	5	1	Z4C3
GDZJ 4.7A	4.7	4.44	4.68	90	5	900	1	5	1	Z4A7
GDZJ 4.7B	4.7	4.55	4.8	90	5	900	1	5	1	Z4B7
GDZJ 4.7C	4.7	4.68	4.93	90	5	900	1	5	1	Z4C7
GDZJ 5.1A	5.1	4.81	5.07	80	5	800	1	5	1.5	Z5A1
GDZJ 5.1B	5.1	4.94	5.2	80	5	800	1	5	1.5	Z5B1
GDZJ 5.1C	5.1	5.09	5.37	80	5	800	1	5	1.5	Z5C1
GDZJ 5.6A	5.6	5.28	5.55	60	5	500	1	5	2.5	Z5A6
GDZJ 5.6B	5.6	5.45	5.73	60	5	500	1	5	2.5	Z5B6
GDZJ 5.6C	5.6	5.61	5.91	60	5	500	1	5	2.5	Z5C6
GDZJ 6.2A	6.2	5.78	6.09	60	5	300	1	5	3	Z6A2
GDZJ 6.2B	6.2	5.96	6.27	60	5	300	1	5	3	Z6B2
GDZJ 6.2C	6.2	6.12	6.44	60	5	300	1	5	3	Z6C2
GDZJ 6.8A	6.8	6.29	6.63	20	5	150	0.5	2	3.5	Z6A8
GDZJ 6.8B	6.8	6.49	6.83	20	5	150	0.5	2	3.5	Z6B8
GDZJ 6.8C	6.8	6.66	7.01	20	5	150	0.5	2	3.5	Z6C8
GDZJ 7.5A	7.5	6.85	7.22	20	5	120	0.5	0.5	4	Z7A5
GDZJ 7.5B	7.5	7.07	7.45	20	5	120	0.5	0.5	4	Z7B5
GDZJ 7.5C	7.5	7.29	7.67	20	5	120	0.5	0.5	4	Z7C5
GDZJ 8.2A	8.2	7.53	7.92	20	5	120	0.5	0.5	5	Z8A2
GDZJ 8.2B	8.2	7.78	8.19	20	5	120	0.5	0.5	5	Z8B2
GDZJ 8.2C	8.2	8.03	8.45	20	5	120	0.5	0.5	5	Z8C2
GDZJ 9.1A	9.1	8.29	8.73	25	5	120	0.5	0.5	6	Z9A1
GDZJ 9.1B	9.1	8.57	9.01	25	5	120	0.5	0.5	6	Z9B1
GDZJ 9.1C	9.1	8.83	9.3	25	5	120	0.5	0.5	6	Z9C1
GDZJ 10A	10	9.12	9.59	30	5	120	0.5	0.2	7	Z10A
GDZJ 10B	10	9.41	9.9	30	5	120	0.5	0.2	7	Z10B
GDZJ 10C	10	9.7	10.2	30	5	120	0.5	0.2	7	Z10C
GDZJ 10D	10	9.94	10.44	30	5	120	0.5	0.2	7	Z10D
GDZJ 11A	11	10.18	10.71	30	5	120	0.5	0.2	8	Z11A
GDZJ 11B	11	10.5	11.05	30	5	120	0.5	0.2	8	Z11B
GDZJ 11C	11	10.82	11.38	30	5	120	0.5	0.2	8	Z11C

# GDZJ2.0~GDZJ56

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>TT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
500 mW Zener Diodes										
GDZJ 12A	12	11.13	11.71	30	5	110	0.5	0.2	9	Z12A
GDZJ 12B	12	11.44	12.03	30	5	110	0.5	0.2	9	Z12B
GDZJ 12C	12	11.74	12.35	30	5	110	0.5	0.2	9	Z12C
GDZJ 13A	13	12.11	12.75	35	5	110	0.5	0.2	10	Z13A
GDZJ 13B	13	12.55	13.21	35	5	110	0.5	0.2	10	Z13B
GDZJ 13C	13	12.99	13.66	35	5	110	0.5	0.2	10	Z13C
GDZJ 15A	15	13.44	14.13	40	5	110	0.5	0.2	11	Z15A
GDZJ 15B	15	13.89	14.62	40	5	110	0.5	0.2	11	Z15B
GDZJ 15C	15	14.35	15.09	40	5	110	0.5	0.2	11	Z15C
GDZJ 16A	16	14.8	15.57	40	5	150	0.5	0.2	12	Z16A
GDZJ 16B	16	15.25	16.04	40	5	150	0.5	0.2	12	Z16B
GDZJ 16C	16	15.69	16.51	40	5	150	0.5	0.2	12	Z16C
GDZJ 18A	18	16.22	17.06	45	5	150	0.5	0.2	13	Z18A
GDZJ 18B	18	16.82	17.7	45	5	150	0.5	0.2	13	Z18B
GDZJ 18C	18	17.42	18.33	45	5	150	0.5	0.2	13	Z18C
GDZJ 20A	20	18.02	18.96	55	5	200	0.5	0.2	15	Z20A
GDZJ 20B	20	18.63	19.59	55	5	200	0.5	0.2	15	Z20B
GDZJ 20C	20	19.23	20.22	55	5	200	0.5	0.2	15	Z20C
GDZJ 20D	20	19.72	20.72	55	5	200	0.5	0.2	15	Z20D
GDZJ 22A	22	20.15	21.2	30	5	200	0.5	0.2	17	Z22A
GDZJ 22B	22	20.64	21.71	30	5	200	0.5	0.2	17	Z22B
GDZJ 22C	22	21.08	22.17	30	5	200	0.5	0.2	17	Z22C
GDZJ 22D	22	21.52	22.63	30	5	200	0.5	0.2	17	Z22D
GDZJ 24A	24	22.05	23.18	35	5	200	0.5	0.2	19	Z24A
GDZJ 24B	24	22.61	23.77	35	5	200	0.5	0.2	19	Z24B
GDZJ 24C	24	23.12	24.31	35	5	200	0.5	0.2	19	Z24C
GDZJ 24D	24	23.63	24.85	35	5	200	0.5	0.2	19	Z24D
GDZJ 27A	27	24.26	25.52	45	5	250	0.5	0.2	21	Z27A
GDZJ 27B	27	24.97	26.26	45	5	250	0.5	0.2	21	Z27B
GDZJ 27C	27	25.63	26.95	45	5	250	0.5	0.2	21	Z27C
GDZJ 27D	27	26.29	27.64	45	5	250	0.5	0.2	21	Z27D
GDZJ 30A	30	26.99	28.39	55	5	250	0.5	0.2	23	Z30A
GDZJ 30B	30	27.7	29.13	55	5	250	0.5	0.2	23	Z30B
GDZJ 30C	30	28.36	29.82	55	5	250	0.5	0.2	23	Z30C
GDZJ 30D	30	29.02	30.51	55	5	250	0.5	0.2	23	Z30D
GDZJ 33A	33	29.68	31.22	65	5	250	0.5	0.2	25	Z33A
GDZJ 33B	33	30.32	31.88	65	5	250	0.5	0.2	25	Z33B
GDZJ 33C	33	30.90	32.5	65	5	250	0.5	0.2	25	Z33C
GDZJ 33D	33	31.49	33.11	65	5	250	0.5	0.2	25	Z33D
GDZJ 36A	36	32.14	33.79	75	5	250	0.5	0.2	27	Z36A
GDZJ 36B	36	32.79	34.49	75	5	250	0.5	0.2	27	Z36B
GDZJ 36C	36	33.4	35.13	75	5	250	0.5	0.2	27	Z36C
GDZJ 36D	36	34.01	35.77	75	5	250	0.5	0.2	27	Z36D
GDZJ 39A	39	34.68	36.47	85	5	250	0.5	0.2	30	Z39A
GDZJ 39B	39	35.36	37.19	85	5	250	0.5	0.2	30	Z39B
GDZJ 39C	39	36	37.85	85	5	250	0.5	0.2	30	Z39C
GDZJ 39D	39	36.63	38.52	85	5	250	0.5	0.2	30	Z39D
GDZJ 43	43	40	45	90	5	-	-	0.2	33	Z43
GDZJ 47	47	44	49	90	5	-	-	0.2	36	Z47
GDZJ 51	51	48	54	110	5	-	-	0.2	39	Z51
GDZJ 56	56	53	60	110	5	-	-	0.2	43	Z56

# GDZJ2.0~GDZJ56

## RATING AND CHARACTERISTIC CURVES

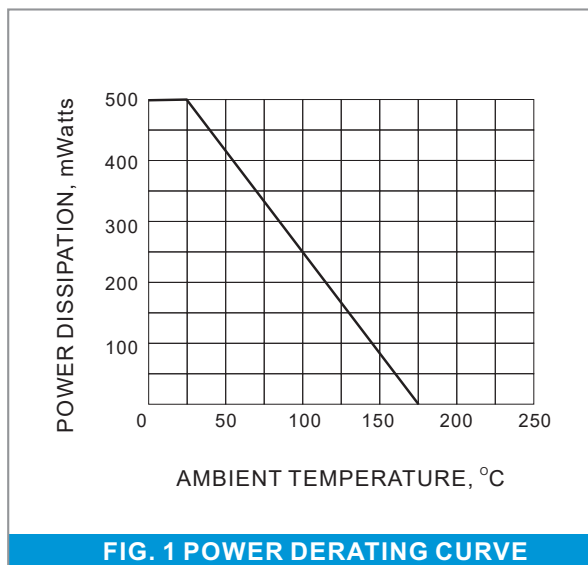


FIG. 1 POWER DERATING CURVE

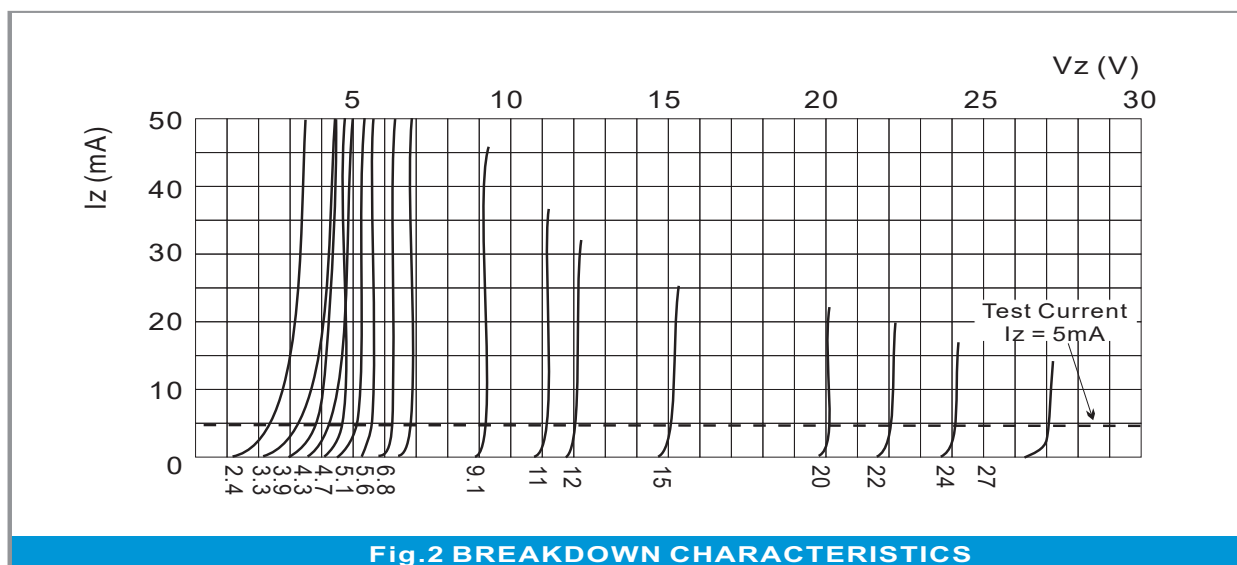


Fig.2 BREAKDOWN CHARACTERISTICS

## GDZJ2.0~GDZJ56

### Part No\_packing code\_Version

GDZJ2.0A\_AX\_10001

GDZJ2.0A\_AY\_10001

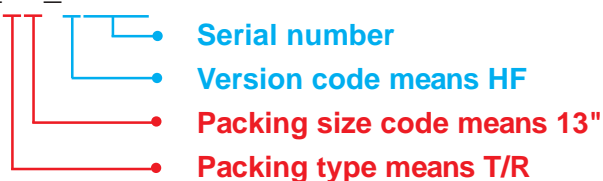
GDZJ2.0A\_B0\_10001

GDZJ2.0A\_R2\_10001

For example :

**RB500V-40\_R2\_00001**

Part No.



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

## Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Siyang Grande Electronics Co., Ltd..
- Siyang Grande Electronics Co., Ltd. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Siyang Grande Electronics Co., Ltd. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Siyang Grande Electronics Co., Ltd. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Siyang Grande Electronics Co., Ltd. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Siyang Grande Electronics Co., Ltd. for any damages resulting from such improper use or sale.
- Since Grande uses lot number as the tracking base, please provide the lot number for tracking when complaining.