

Low Noise Zener Diode

KDZ4.7VL~KDZ39VL

CONSTANT VOLTAGE REGULATION
REFERENCE VOLTAGE
LOW NOISE

FEATURES

- Small Package : USC
- High Noise Immunity

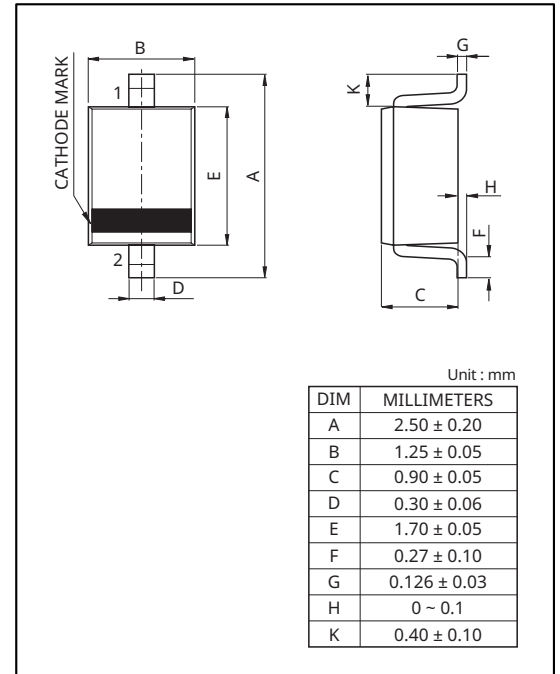
APPLICATIONS

- Constant Voltage Regulation
- Reference Voltage Regulation

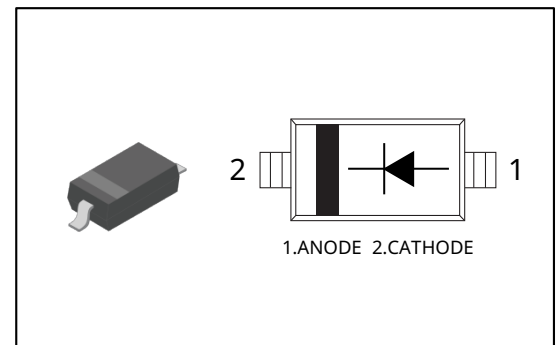
MARKING CODE

Type No.	Marking	Type No.	Marking	Type No.	Marking
KDZ4.7VL	DL	KDZ10VL	D3	KDZ22VL	LC
KDZ5.1VL	DN	KDZ11VL	D4	KDZ24VL	LE
KDZ5.6VL	DM	KDZ12VL	D5	KDZ27VL	LF
KDZ6.2VL	DP	KDZ13VL	D6	KDZ30VL	LG
KDZ6.8VL	DS	KDZ15VL	D7	KDZ33VL	LH
KDZ7.5VL	DT	KDZ16VL	D8	KDZ36VL	LJ
KDZ8.2VL	DV	KDZ18VL	D9	KDZ39VL	LK
KDZ9.1VL	DW	KDZ20VL	LB		

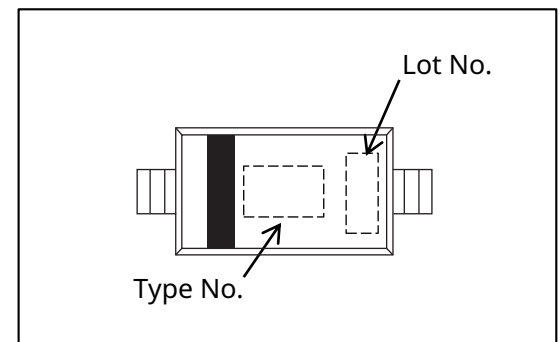
PACKAGE DIMENSION (USC)



PIN CONFIGURATION



MARKING CODE



PRODUCT DATASHEET

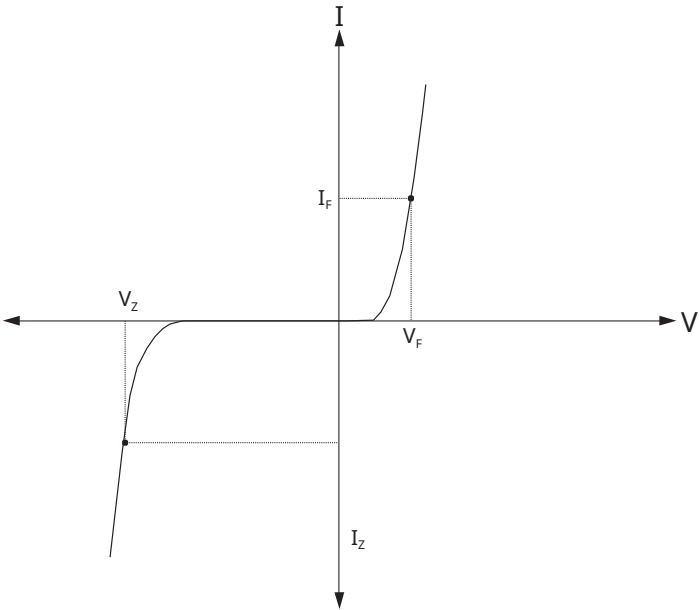
Low Noise Zener Diode – KDZ4.7VL~39VL

MAXIMUM RATING (T_A=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P _D [*]	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~150	°C

* Mounted on a glass epoxy circuit board of 20x20mm, pad dimension of 4x4mm

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL



ELECTRICAL CHARACTERISTICS (T_A=25°C)

TYPE No.	Zener Voltage V _Z (V)						Reverse Current I _R (μA)	
	Min.	Max.	I _Z (μA)	Min.	Max.	I _Z (mA)	MAX.	V _R (V)
KDZ4.7VL	2.60	3.30	10	4.68	4.93	5	2.0	1.0
KDZ5.1VL	3.95	4.40	10	4.98	5.20	5	1.0	2.0
KDZ5.6VL	5.10	5.55	10	5.49	5.73	5	0.5	2.5
KDZ6.2VL	5.88	6.32	10	6.05	6.32	5	0.2	4.0
KDZ6.8VL	6.66	6.94	10	6.64	6.93	5	0.1	4.0
KDZ7.5VL	7.35	7.65	10	7.32	7.65	5	0.1	5.0

PRODUCT DATASHEET

Low Noise Zener Diode – KDZ4.7VL~39VL

ELECTRICAL CHARACTERISTICS (T_A=25°C)

TYPE No.	Zener Voltage V _z (V)						Reverse Current I _R (μA)	
	Min.	Max.	I _z (μA)	Min.	Max.	I _z (mA)	MAX.	V _R (V)
KDZ8.2VL	8.04	8.36	10	8.02	8.37	5	0.1	5.0
KDZ9.1VL	8.92	9.28	10	8.89	9.29	5	0.1	6.0
KDZ10VL	9.80	10.20	10	9.80	10.22	5	0.1	7.0
KDZ11VL	10.78	11.22	10	10.76	11.25	5	0.1	8.0
KDZ12VL	11.76	12.24	10	11.76	12.24	5	0.1	9.0
KDZ13VL	12.74	13.26	10	12.74	13.30	5	0.1	10.0
KDZ15VL	14.70	15.30	10	14.70	15.30	5	0.1	11.0
KDZ16VL	15.68	16.30	10	15.68	16.32	5	0.1	12.0
KDZ18VL	17.64	18.36	10	17.64	18.36	5	0.1	13.0
KDZ20VL	19.60	20.40	10	19.60	20.40	5	0.1	15.0
KDZ22VL	21.56	22.44	10	21.56	22.47	5	0.1	17.0
KDZ24VL	23.52	24.48	10	23.52	24.48	5	0.1	19.0
KDZ27VL	26.46	27.54	10	26.46	27.54	2	0.1	21.0
KDZ30VL	29.40	30.60	10	29.45	30.75	2	0.1	23.0
KDZ33VL	32.34	33.66	10	32.34	33.66	2	0.1	25.0
KDZ36VL	35.28	36.72	10	35.28	36.72	2	0.1	27.0
KDZ39VL	38.24	39.76	10	38.22	39.78	2	0.1	30.0

PRODUCT DATASHEET

Low Noise Zener Diode – KDZ4.7VL~39VL

Fig 1. Zener Current vs. Zener Voltage

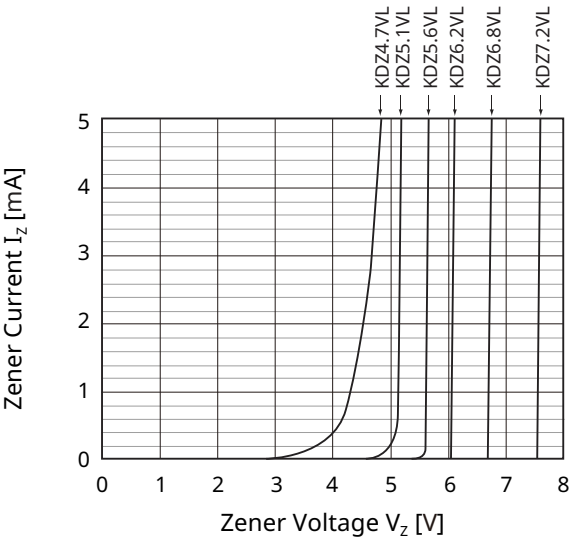


Fig 2. Zener Current vs. Zener Voltage

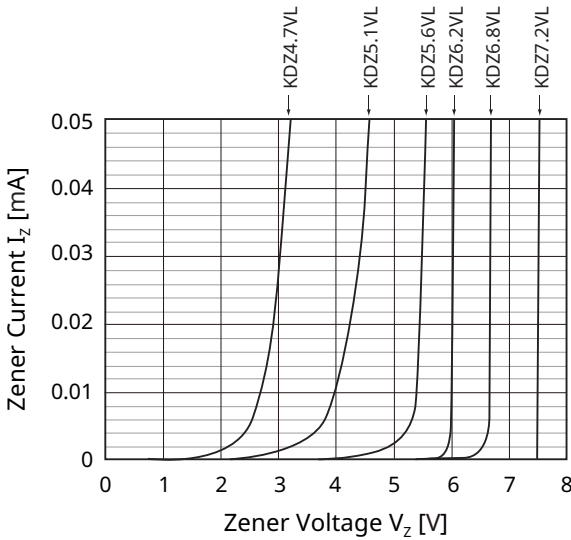


Fig 3. Zener Current vs. Zener Voltage

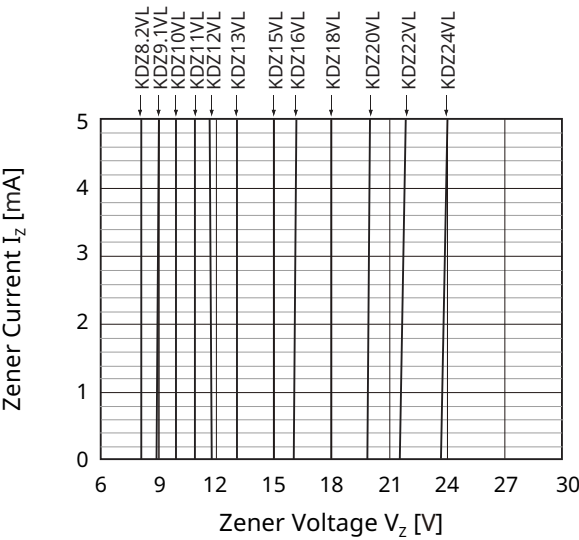


Fig 4. Zener Current vs. Zener Voltage

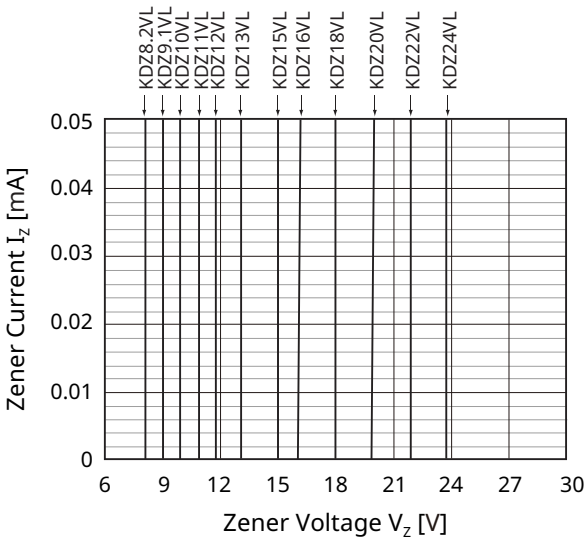


Fig 5. Zener Current vs. Zener Voltage

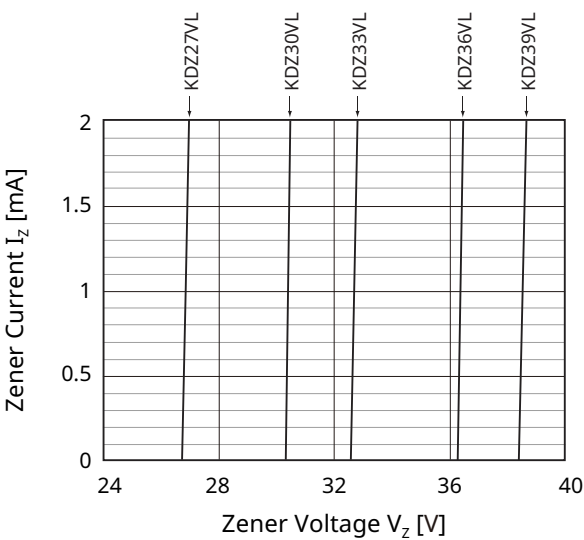
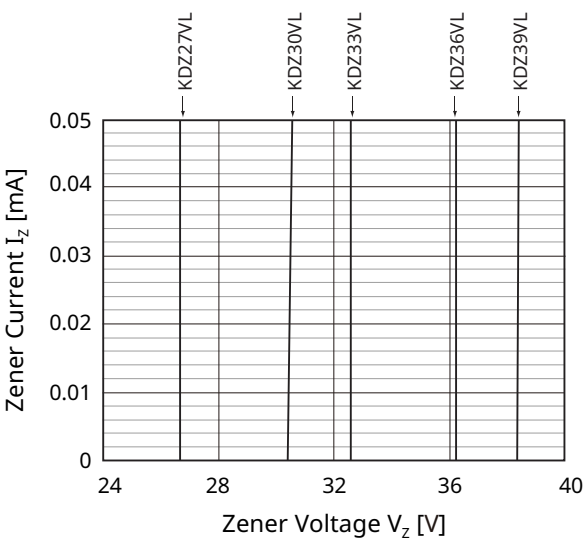


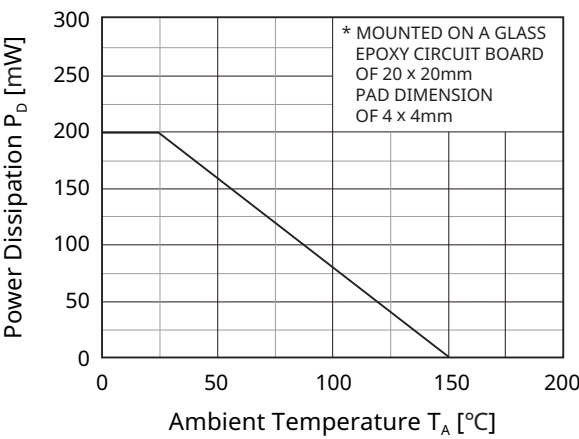
Fig 6. Zener Current vs. Zener Voltage



PRODUCT DATASHEET

Low Noise Zener Diode – KDZ4.7VL~39VL

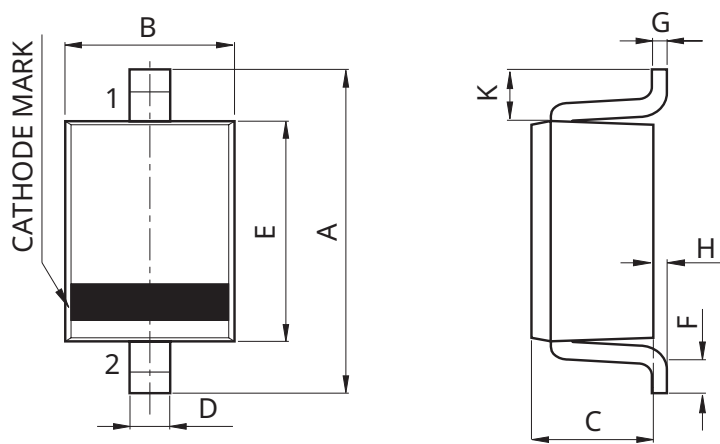
Fig 7. Power Dissipation vs.
Ambient Temperature



PRODUCT DATASHEET

Low Noise Zener Diode – KDZ4.7VL~39VL

PACKAGE DIMENSION (USC)

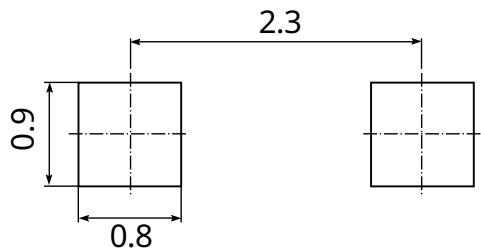


Unit : mm

DIM	MILLIMETERS
A	2.50 ± 0.20
B	1.25 ± 0.05
C	0.90 ± 0.05
D	0.30 ± 0.06
E	1.70 ± 0.05
F	0.27 ± 0.10
G	0.126 ± 0.03
H	0 ~ 0.1
K	0.40 ± 0.10

RECOMMENDED PAD DIMENSION

Unit: mm



PRODUCT DATASHEET

Low Noise Zener Diode – KDZ4.7VL~39VL

ORDERING INFORMATION

Part Number	Status	Compliance			Packing Type	Packing Qty
		AEC-Q	Pb-Free	Halogen Free		
KDZ4.7VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ5.1VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ5.6VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ6.2VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ6.8VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ7.5VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ8.2VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ9.1VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ10VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ11VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ12VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ13VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ15VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ16VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ18VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ20VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ22VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ24VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ27VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ30VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ33VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ36VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs
KDZ39VL-RTK/H	Active	-	Y	Y	Reel	3,000pcs

PRECAUTION ON USING KEC PRODUCTS

1. The products described in this data are intended to be used in general-purpose electronic equipment.
(Office equipment, telecommunication equipment, measuring equipment, home appliances)
2. When you intend to use these products with equipment or device which require an extremely high of reliability and special applications (such as automobile, air travel aerospace, transportation equipment, life support, system and safety devices) in which special quality and reliability and the failure or malfunction of products may directly jeopardize or harm the human body or damage to property and any application other than the standard application intended, please be sure to consult with our sales representative in advance.
3. On designing your application, please use product within the ranges guaranteed by KEC for maximum rating, operating supply voltage range, heat radiation characteristics and other characteristics. User shall be responsible for failure or damage when used beyond the guaranteed ranges.
4. The technical information described in this data is limited to showing representative characteristics and applied circuit examples of the products and it does not constitute the warranting of industrial property, the granting of relative rights, or the granting of any license.
5. What are described in the data may be changed without any prior notice to reflect new technical development. Please confirm that you have received the latest product standards or specification before final design, purchase or use.
6. Although KEC is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors. Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. KEC shall have no responsibility for any damages arising out of the use of our Products beyond the rating specified by KEC.

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