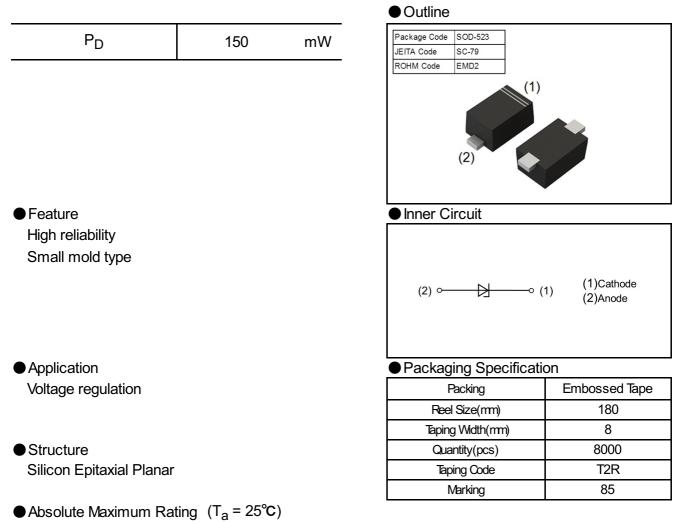


## Data sheet



Parameter	Symbol	Limits	Unit
Power dissipation	PD	150	mW
Junction temperature	Тj	150	°C
Storage temperature	T <sub>stg</sub>	-55 ~ 150	°C

## **EDZV** Series

# • Characteristic ( $T_a = 25^{\circ}C$ )

	Symbol								
P/N	Zener Voltage:V <sub>Z</sub> (V)			Dynamic Impedance: $Z_Z(\Omega)$		Zener Impedance: $Z_{ZK}(\Omega)$		Reverse Current:I <sub>R</sub> (µA)	
	MIN.	MAX.	l <sub>z</sub> (mA)	MAX.	l <sub>z</sub> (mA)	MAX.	l <sub>z</sub> (mA)	MAX.	V <sub>R</sub> (V)
EDZV 2.0B	2.020	2.200	5.0	100	5.0	1000	0.5	120	0.5
EDZV 2.2B	2.220	2.410	5.0	100	5.0	1000	0.5	120	0.7
EDZV 2.4B	2.430	2.630	5.0	100	5.0	1000	0.5	120	1.0
EDZV 2.7B	2.690	2.910	5.0	110	5.0	1000	0.5	100	1.0
EDZV 3.0B	3.010	3.220	5.0	120	5.0	1000	0.5	50.0	1.0
EDZV 3.3B	3.320	3.530	5.0	120	5.0	1000	0.5	20.0	1.0
EDZV 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
EDZV 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
EDZV 4.3B	4.170	4.430	5.0	100	5.0	1000	1.0	5.0	1.0
EDZV 4.7B	4.550	4.750	5.0	100	5.0	800	0.5	2.0	1.0
EDZV 5.1B	4.980	5.200	5.0	80	5.0	500	0.5	2.0	1.5
EDZV 5.6B	5.490	5.730	5.0	60	5.0	200	0.5	1.0	2.5
EDZV 6.2B	6.060	6.330	5.0	60	5.0	100	0.5	1.0	3.0
EDZV 6.8B	6.650	6.930	5.0	40	5.0	60	0.5	0.5	3.5
EDZV 7.5B	7.280	7.600	5.0	30	5.0	60	0.5	0.5	4.0
EDZV 8.2B	8.020	8.360	5.0	30	5.0	60	0.5	0.5	5.0
EDZV 9.1B	8.850	9.230	5.0	30	5.0	60	0.5	0.5	6.0
EDZV 10B	9.770	10.21	5.0	30	5.0	60	0.5	0.1	7.0
EDZV 11B	10.76	11.22	5.0	30	5.0	60	0.5	0.1	8.0
EDZV 12B	11.74	12.24	5.0	30	5.0	80	0.5	0.1	9.0
EDZV 13B	12.91	13.49	5.0	37	5.0	80	0.5	0.1	10.0
EDZV 15B	14.34	14.98	5.0	42	5.0	80	0.5	0.1	11.0
EDZV 16B	15.85	16.51	5.0	50	5.0	80	0.5	0.1	12.0
EDZV 18B	17.56	18.35	5.0	65	5.0	80	0.5	0.1	13.0
EDZV 20B	19.52	20.39	5.0	85	5.0	100	0.5	0.1	15.0
EDZV 22B	21.54	22.47	5.0	100	5.0	100	0.5	0.1	17.0
EDZV 24B	23.72	24.78	5.0	120	5.0	120	0.5	0.1	19.0
EDZV 27B	26.19	27.53	2.0	150	2.0	150	0.5	0.1	21.0
EDZV 30B	29.19	30.69	2.0	200	2.0	200	0.5	0.1	23.0
EDZV 33B	32.15	33.79	2.0	250	2.0	250	0.5	0.1	25.0
EDZV 36B	35.07	36.87	2.0	300	2.0	300	0.5	0.1	27.0

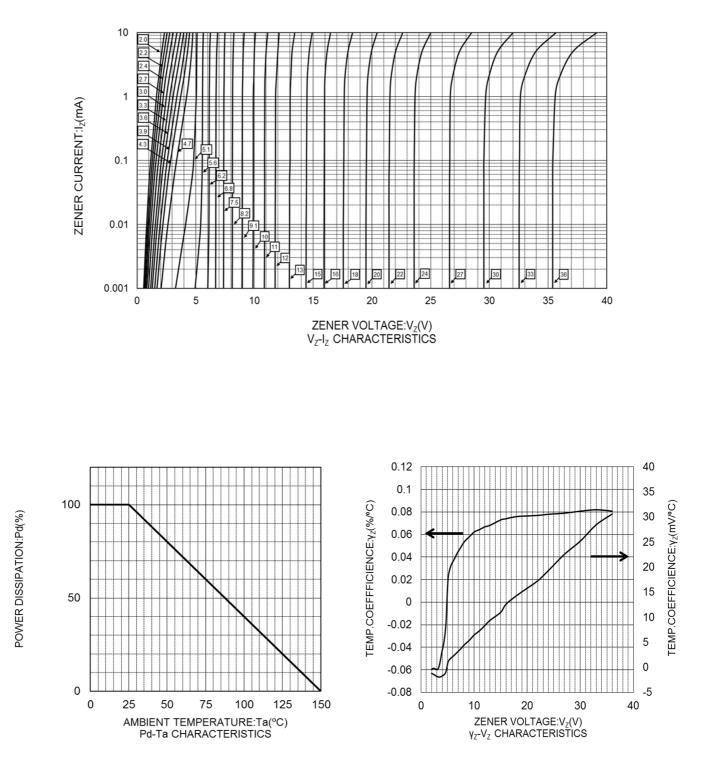
Zener voltage (Vz) is measured by applying current with 40ms pulse. Dynamic resistance (Zz) is measured by applying small current (AC) and specified current (Iz) simultaneously

#### Marking

P/N	Marking	P/N	Marking
EDZV 2.0B	02	EDZV 9.1B	L2
EDZV 2.2B	12	EDZV 10B	05
EDZV 2.4B	22	EDZV 11B	15
EDZV 2.7B	32	EDZV 12B	25
EDZV 3.0B	42	EDZV 13B	35
EDZV 3.3B	52	EDZV 15B	45
EDZV 3.6B	62	EDZV 16B	55
EDZV 3.9B	72	EDZV 18B	65
EDZV 4.3B	82	EDZV 20B	75
EDZV 4.7B	92	EDZV 22B	85
EDZV 5.1B	A2	EDZV 24B	95
EDZV 5.6B	2	EDZV 27B	A5
EDZV 6.2B	E2	EDZV 30B	C5
EDZV 6.8B	F2	EDZV 33B	Б
EDZV 7.5B	H2	EDZV 36B	F5
EDZV 8.2B	J2		

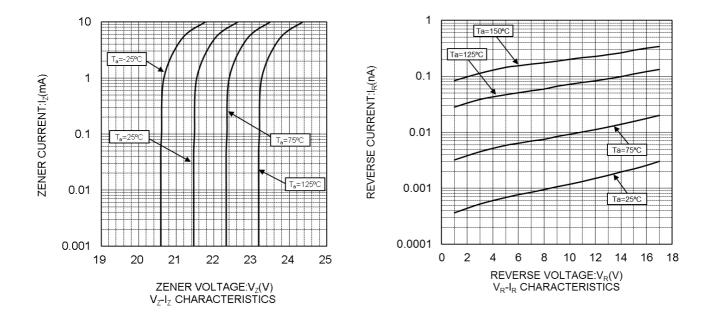


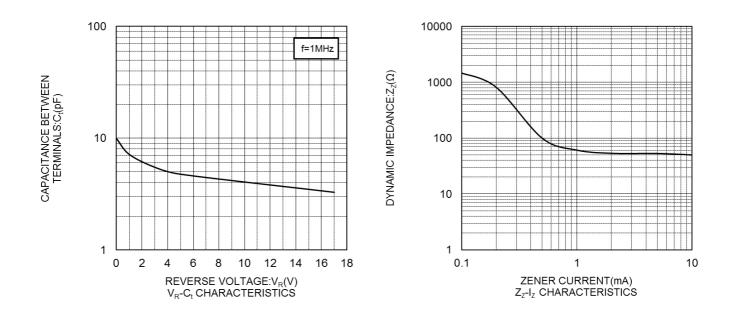
## Characteristic Curves





## Characteristic Curves

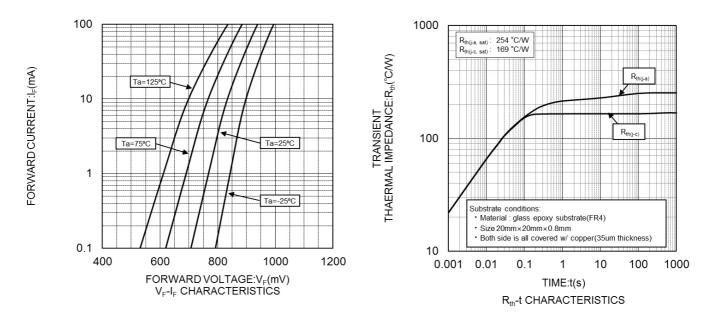




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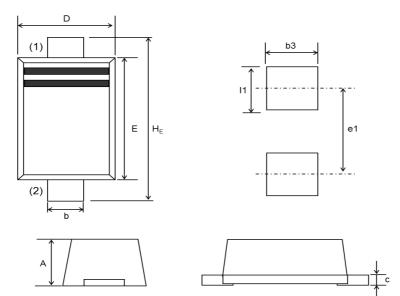


## Characteristic Curves





### • Dimension (EMD2 SOD-523 SC-79)

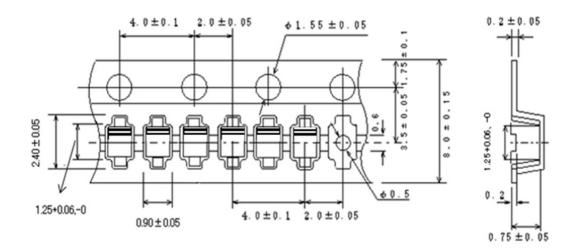


DIM	Milimeters			Inches		
DIVI	Min.	Average	Max.	Min.	Average	Max.
А	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
с	0.07	0.12	0.17	0.003	0.005	0.007
D	0.75	0.80	0.85	0.030	0.031	0.033
E	1.15	1.20	1.25	0.045	0.047	0.049
HE	1.50	1.60	1.70	0.059	0.063	0.067
11	-	0.60	-	-	0.024	-
b3	-	0.80	-	-	0.031	-
e1	-	1.70	-	-	0.067	-

(1) The marking bar indicates the cathode.

(2) The direction indicates the anode.

## •Taping (Unit:mm)



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  - [b] Use of our Products outdoors or in places where the Products are exposed to direct sunlight or dust
  - [c] Use of our Products in places where the Products are exposed to sea wind or corrosive gases, including Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, and NO<sub>2</sub>
  - [d] Use of our Products in places where the Products are exposed to static electricity or electromagnetic waves
  - [e] Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
  - [f] Sealing or coating our Products with resin or other coating materials
  - [g] Use of our Products without cleaning residue of flux (Exclude cases where no-clean type fluxes is used. However, recommend sufficiently about the residue.); or Washing our Products by using water or water-soluble cleaning agents for cleaning residue after soldering
  - [h] Use of the Products in places subject to dew condensation
- 4. The Products are not subject to radiation-proof design.
- 5. Please verify and confirm characteristics of the final or mounted products in using the Products.
- 6. In particular, if a transient load (a large amount of load applied in a short period of time, such as pulse, is applied, confirmation of performance characteristics after on-board mounting is strongly recommended. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
- 7. De-rate Power Dissipation depending on ambient temperature. When used in sealed area, confirm that it is the use in the range that does not exceed the maximum junction temperature.
- 8. Confirm that operation temperature is within the specified range described in the product specification.
- 9. ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

#### Precaution for Mounting / Circuit board design

- 1. When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- 2. In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.

For details, please refer to ROHM Mounting specification

#### **Precautions Regarding Application Examples and External Circuits**

- 1. If change is made to the constant of an external circuit, please allow a sufficient margin considering variations of the characteristics of the Products and external components, including transient characteristics, as well as static characteristics.
- 2. You agree that application notes, reference designs, and associated data and information contained in this document are presented only as guidance for Products use. Therefore, in case you use such information, you are solely responsible for it and you must exercise your own independent verification and judgment in the use of such information contained in this document. ROHM shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties arising from the use of such information.

#### **Precaution for Electrostatic**

This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding the Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of lonizer, friction prevention and temperature / humidity control).

#### Precaution for Storage / Transportation

- 1. Product performance and soldered connections may deteriorate if the Products are stored in the places where:
  - [a] the Products are exposed to sea winds or corrosive gases, including Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, and NO<sub>2</sub>
  - [b] the temperature or humidity exceeds those recommended by ROHM
  - [c] the Products are exposed to direct sunshine or condensation
  - [d] the Products are exposed to high Electrostatic
- 2. Even under ROHM recommended storage condition, solderability of products out of recommended storage time period may be degraded. It is strongly recommended to confirm solderability before using Products of which storage time is exceeding the recommended storage time period.
- 3. Store / transport cartons in the correct direction, which is indicated on a carton with a symbol. Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.
- 4. Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.

#### **Precaution for Product Label**

A two-dimensional barcode printed on ROHM Products label is for ROHM's internal use only.

#### **Precaution for Disposition**

When disposing Products please dispose them properly using an authorized industry waste company.

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