

Zener diode

EDZ Series

● Applications

Constant voltage control

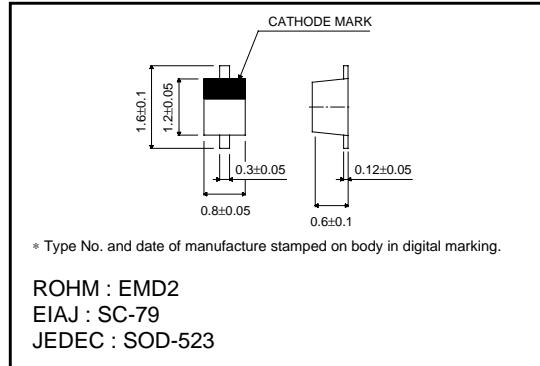
● Features

- 1) Extremely compact, 2-pin mini-mold type for high-density mounting (EMD2).
- 2) Can be mounted automatically, using chip mounter.
- 3) High reliability.

● Construction

Silicon epitaxial planar

● External dimensions (Units : mm)



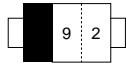
● Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Power dissipation	P	100	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +125	$^\circ\text{C}$
Operating temperature	T_{opr}	-55 ~ +125	$^\circ\text{C}$

● Markings (Type No.)

Product name	Type No.	
EDZ4.7B	9	2
EDZ5.1B	A	2
EDZ5.6B	C	2
EDZ6.2B	E	2
EDZ6.8B	F	2

(Ex.) EDZ4.7B



Diodes

● Electrical characteristics ($T_a = 25^\circ\text{C}$)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	V_z (V)			Z_z (Ω)		Z_{z_k} (Ω)		I_R (μA)	
	Min.	Max.	I_z (mA)	Max.	I_z (mA)	Max.	I_z (mA)	Max.	V_R (V)
EDZ4.7B	4.550	4.750	5	100	5	800	0.5	2	1.0
EDZ5.1B	4.980	5.200	5	80	5	500	0.5	2	1.5
EDZ5.6B	5.490	5.730	5	60	5	200	0.5	1	2.5
EDZ6.2B	6.060	6.330	5	60	5	100	0.5	1.0	3.0
EDZ6.8B	6.650	6.930	5	40	5	60	0.5	0.5	3.5

Notes) 1. The Zener voltage (V_z) is measured 40ms after power is supplied.

2. The operating resistances (Z_z , Z_{z_k}) are measured by superimposing a minute alternating current on the regulated current (I_z).

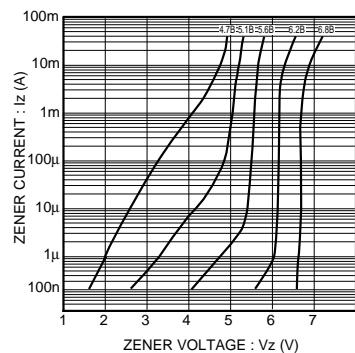
● Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

Fig. 1 Zener characteristics

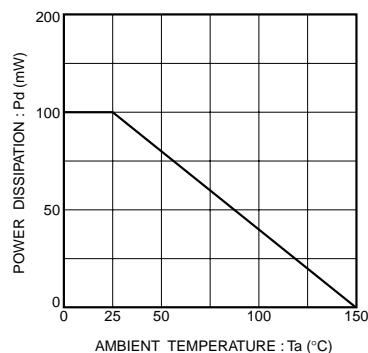


Fig. 2 Derating curve

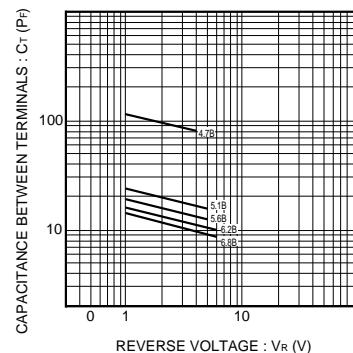


Fig. 3 Capacitance between terminal characteristics

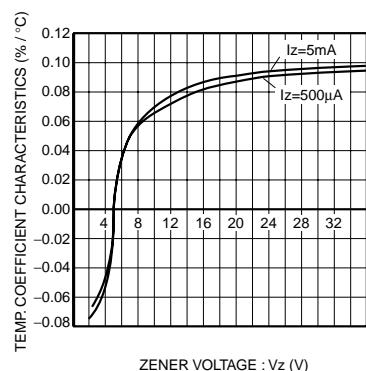


Fig. 4 Zener voltage-temp. coefficient characteristics

* EDZ series : $V_z=4.7\text{V}-6.8\text{V}$