

# Sub-miniature Composite Zener Diodes

## Compact Zener Diodes

Type	Vz (V)	Iz (mA)	Circuit	Package
VDZ B series EDZ B series	4.7~8.2V	5mA		VMD2 (1006) EMD2 (1408)
VMZ 6.8N EMZ 6.8N	6.47~7.14V	5mA		VMD3
EMZ 5.1M EMZ 5.6N	4.98~5.20V 5.31~5.92V			EMD3
EMZ 6.8E	6.47~7.14V			EMD5

\*Products with different voltages are available. Contact your ROHM representative.

## EDZ B series

**Application**  
Voltage control

**Features**

- Sub-miniature, 2-pin mini-mold of high-density mounting type: EMD2 (1208)
- High reliability

**Absolute Maximum Ratings (Ta=25 C)**

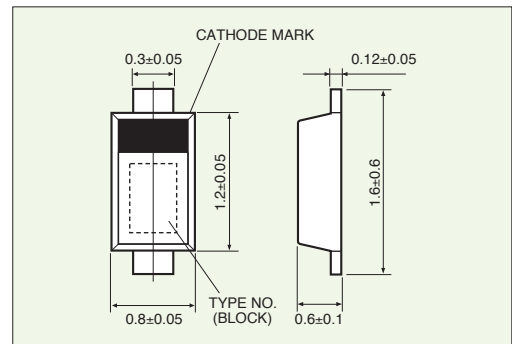
Item	Symbol	Rating	Unit
Permissible dissipation	P	150	mW
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55~+150	C
Operating temperature	Topt	-55~+150	C

**Electrical Characteristics (Ta=25 C)**

Item	Zener voltage		Operating resistance Iz (mA)	Operating resistance on rising edge Zz (Ω) Zzk (Ω)		Reverse current Ir (μA) Vr (V)	
	Vz (V)			Max.	Max.	Max.	Max.
	Min.	Max.					
EDZ 4.3B	4.170	4.430	100	1000	1.0	5.0	1.0
EDZ 4.7B	4.550	4.750					
EDZ 5.1B	4.980	5.200	80	500	2.0	1.5	2.5
EDZ 5.6B	5.490	5.730					
EDZ 6.2B	6.060	6.330	60	100	1.0	3.0	3.5
EDZ 6.8B	6.650	6.930					
EDZ 7.5B	7.280	7.600	40	5.0	0.5	4.0	5.0
EDZ 8.2B	8.020	8.360					
EDZ 9.1B	8.850	9.230	30	60	0.5	6.0	7.0
EDZ 10B	9.770	10.21					
EDZ 11B	10.76	11.22					8.0
EDZ 12B	11.74	12.24					9.0

(1) The Zener voltage (Vz) of each diode was measured 40ms after the diode was energized.  
 (2) The operating resistance (Zz or Zzk) was measured with a specified current (Iz) plus a minute alternating current superimposed.

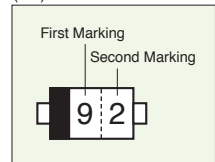
**External Dimensions (Unit: mm)**



**Markings (TYPE No.)**

Item	TYPE No.	Item	TYPE No.
EDZ 4.3B	8	EDZ 7.5B	H
EDZ 4.7B	9	EDZ 8.2B	J
EDZ 5.1B	A	EDZ 9.1B	L
EDZ 5.6B	C	EDZ 10B	0
EDZ 6.2B	E	EDZ 11B	1
EDZ 6.8B	F	EDZ 12B	2

(EX) EDZ 4.7B



## VDZ B series

**Application**  
Voltage control

**Features**

- Sub-miniature, 2-pin mini-mold of high-density mounting type: VMD2 (1006)
- High reliability

**Absolute Maximum Ratings (Ta=25 C)**

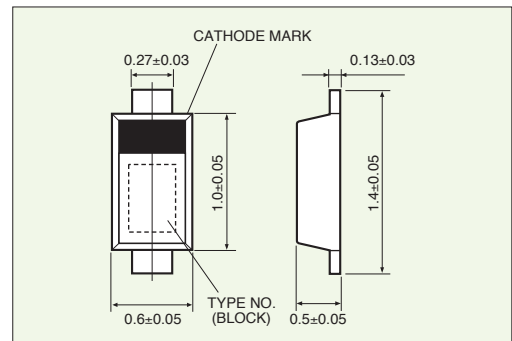
Item	Symbol	Rating	Unit
Permissible dissipation	P	100	mW
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55~+150	0 C
Operating temperature	Topt	-55~+150	C

**Electrical Characteristics (Ta=25 C)**

Item	Zener voltage		Operating resistance Iz (mA)	Operating resistance on rising edge Zz (Ω) Zzk (Ω)		Reverse current Ir (μA) Vr (V)	
	Vz (V)			Max.	Max.	Max.	Max.
	Min.	Max.					
VDZ 4.7B	4.550	4.750	100	800	1.0	2.0	1.0
VDZ 5.1B	4.980	5.200					
VDZ 5.6B	5.490	5.730	80	500	2.0	1.5	2.5
VDZ 6.2B	6.060	6.330					
VDZ 6.8B	6.650	6.930	60	100	1.0	3.0	3.5
VDZ 7.5B	7.280	7.600					
VDZ 8.2B	8.020	8.360	40	5.0	0.5	4.0	5.0
			30	60	0.5	6.0	7.0

(1) The Zener voltage (Vz) of each diode was measured 40ms after the diode was energized.  
 (2) The operating resistance (Zz or Zzk) was measured with a specified current (Iz) plus a minute alternating current superimposed.

**External Dimensions (Unit: mm)**



**Markings (TYPE No.)**

Item	TYPE No.
VDZ 4.7B	9
VDZ 5.1B	A
VDZ 5.6B	C
VDZ 6.2B	E
VDZ 6.8B	F
VDZ 7.5B	H
VDZ 8.2B	J

(EX) VDZ 4.7B

