

# DZ23 Series

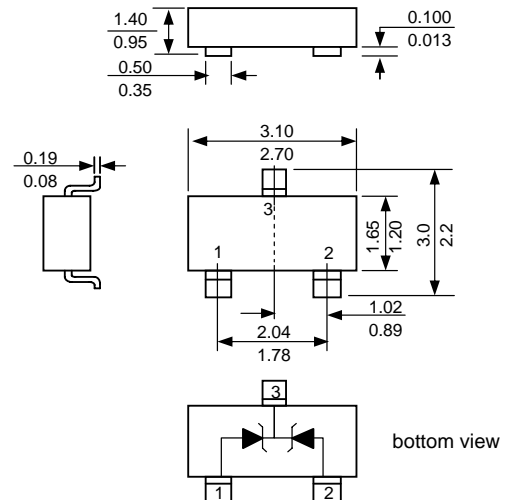
Zener Diodes

## SOT-23



### Features

- ✧ Zener Voltage Range 2.7 V to 51 V
- ✧ Dual Silicon Zener Diodes, Common Cathode
- ✧ Small Package Size for High Density Applications
- ✧ Standard Zener voltage tolerance is  $\pm 5\%$ .
- ✧ Pb / RoHS Free



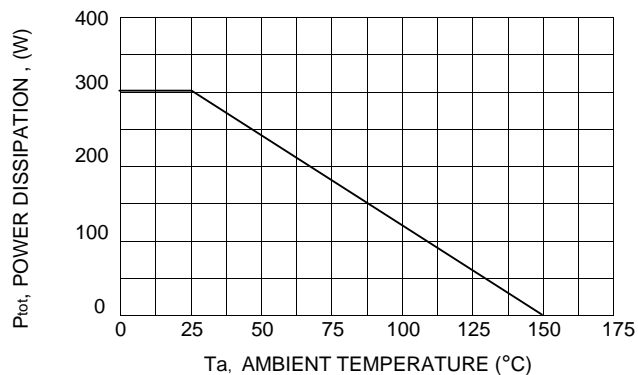
Dimensions in millimeters

### Absolute Maximum Ratings (Ta = 25 °C)

RATING	SYMBOL	VALUE	UNIT
Total Power Dissipation (Note 1)	P <sub>tot</sub>	300	mW
Thermal Resistance ( Junction to Ambient) (Note 1)	R <sub>θJA</sub>	420	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150	°C

Note : (1) Device on fiberglass substrate.

Fig. 1 POWER TEMPERATURE DERATING CURVE



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### ELECTRICAL CHARACTERISTICS (Ta=25 °C unless otherwise noted)

Type No.	Marking	Zener Voltage <sup>(1)</sup>		Test Current	Dynamic Impedance(f = 1 kHz)		Test Current	Min. Reverse Voltage at I <sub>R</sub> = 100 nA	Temperature Coefficient at Zener Voltage	
		V <sub>Z</sub> @ I <sub>ZT</sub> (V)		I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	V <sub>R</sub>	α <sub>VZ</sub> at I <sub>Z</sub> = 5 mA	
		Min.	Max.	(mA)	(Ω)	(Ω)	(mA)	(V)	(10 <sup>-4</sup> /°C)	
DZ23C2V7	JJ	2.5	2.9	5.0	75(<83)	<500	1.0	-	-9	-4
DZ23C3V0	JK	2.8	3.2	5.0	80(<95)	<500	1.0	-	-9	-3
DZ23C3V3	JM	3.1	3.5	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23C3V6	JN	3.4	3.8	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23C3V9	JP	3.7	4.1	5.0	80(<95)	<500	1.0	-	-7	-3
DZ23C4V3	JR	4.0	4.6	5.0	80(<95)	<500	1.0	-	-6	-1
DZ23C4V7	JX	4.4	5.0	5.0	70(<78)	<500	1.0	-	-5	2
DZ23C5V1	JY	4.8	5.4	5.0	30(<60)	<480	1.0	0.8	-3	4
DZ23C5V6	JZ	5.2	6.0	5.0	10(<40)	<400	1.0	1.0	-2	6
DZ23C6V2	KA	5.8	6.6	5.0	4.8(<10)	<200	1.0	2.0	-1	7
DZ23C6V8	KB	6.4	7.2	5.0	4.5(<8)	<150	1.0	3.0	2	7
DZ23C7V5	KC	7.0	7.9	5.0	4(<7)	<50	1.0	5.0	-3	7
DZ23C8V2	KD	7.7	8.7	5.0	4.5(<7)	<50	1.0	6.0	4	7
DZ23C9V1	KE	8.5	9.6	5.0	4.8(<10)	<50	1.0	7.0	5	8
DZ23C10	KF	9.4	10.6	5.0	5.2(<15)	<70	1.0	7.5	5	8
DZ23C11	KH	10.4	11.6	5.0	6(<20)	<70	1.0	8.5	5	9
DZ23C12	KJ	11.4	12.7	5.0	7(<20)	<90	1.0	9.0	6	9
DZ23C13	KK	12.4	14.1	5.0	9(<25)	<110	1.0	10.0	7	9
DZ23C15	KM	13.8	15.6	5.0	11(<30)	<110	1.0	11.0	7	9
DZ23C16	KN	15.3	17.1	5.0	13(<40)	<170	1.0	12.0	8	9.5
DZ23C18	KP	16.8	19.1	5.0	18(<50)	<170	1.0	14.0	8	9.5
DZ23C20	KR	18.8	21.2	5.0	20(<50)	<220	1.0	15.0	8	10
DZ23C22	KX	20.8	23.3	5.0	25(<55)	<220	1.0	17.0	8	10
DZ23C24	KY	22.8	25.6	5.0	28(<80)	<220	1.0	18.0	8	10
DZ23C27	KZ	25.1	28.9	5.0	30(<80)	<250	1.0	20.0	8	10
DZ23C30	MA	28.0	32.0	5.0	35(<80)	<250	1.0	22.5	8	10
DZ23C33	MB	31.0	35.0	5.0	40(<80)	<250	1.0	25.0	8	10
DZ23C36	MC	34.0	38.0	5.0	40(<90)	<250	1.0	27.0	8	10
DZ23C39	MD	37.0	41.0	5.0	50(<90)	<300	1.0	29.0	10	12
DZ23C43	ME	40.0	46.0	5.0	60(<100)	<700	1.0	32.0	10	12
DZ23C47	MF	44.0	50.0	5.0	70(<100)	<750	1.0	35.0	10	12
DZ23C51	MH	48.0	54.0	5.0	70(<100)	<750	1.0	38.0	10	12

Note : (1) Tested with pulses tp = 5 ms.