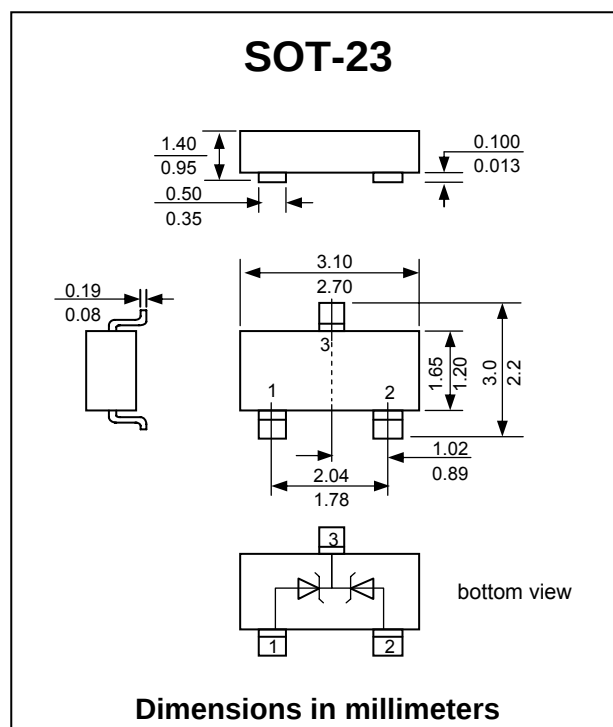


DZ23- Series

ZENER DIODE

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 volt-age tolerance is $\pm 5\%$.
Replace "C" with "B" for 2 % tolerance.
- * Pb / RoHS Free

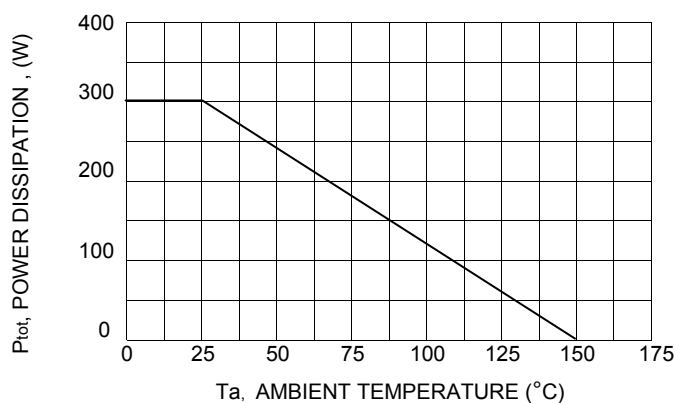


Absolute Maximum Ratings (Ta = 25 °C)

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

Note : (1) Device on fiberglass substrate.

Fig. 1 POWER TEMPERATURE DERATING CURVE



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

Type No.	Marking	Zener Voltage ⁽¹⁾		Test Current	Dynamic Impedance(f = 1 kHz)		Test Current	Min. Reverse Voltage at I _R = 100 nA	Temperature Coefficient at Zener Voltage	
		V _Z @ I _{ZT} (V)		I _{ZT}	Z _{YT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	V _R	α _{VZ} at I _Z = 5 mA	
		Min.	Max.	(mA)	(Ω)	(Ω)	(mA)	(V)	(10 ⁻⁴ /°C)	
DZ23C2V7	V1	2.5	2.9	5.0	75(<83)	<500	1.0	-	-9	-4
DZ23C3V0	V2	2.8	3.2	5.0	80(<95)	<500	1.0	-	-9	-3
DZ23C3V3	V3	3.1	3.5	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23C3V6	V4	3.4	3.8	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23C3V9	V5	3.7	4.1	5.0	80(<95)	<500	1.0	-	-7	-3
DZ23C4V3	V6	4.0	4.6	5.0	80(<95)	<500	1.0	-	-6	-1
DZ23C4V7	V7	4.4	5.0	5.0	70(<78)	<500	1.0	-	-5	2
DZ23C5V1	V8	4.8	5.4	5.0	30(<60)	<480	1.0	0.8	-3	4
DZ23C5V6	V9	5.2	6.0	5.0	10(<40)	<400	1.0	1.0	-2	6
DZ23C6V2	V10	5.8	6.6	5.0	4.8(<10)	<200	1.0	2.0	-1	7
DZ23C6V8	V11	6.4	7.2	5.0	4.5(<8)	<150	1.0	3.0	2	7
DZ23C7V5	V12	7.0	7.9	5.0	4(<7)	<50	1.0	5.0	-3	7
DZ23C8V2	V13	7.7	8.7	5.0	4.5(<7)	<50	1.0	6.0	4	7
DZ23C9V1	V14	8.5	9.6	5.0	4.8(<10)	<50	1.0	7.0	5	8
DZ23C10	V15	9.4	10.6	5.0	5.2(<15)	<70	1.0	7.5	5	8
DZ23C11	V16	10.4	11.6	5.0	6(<20)	<70	1.0	8.5	5	9
DZ23C12	V17	11.4	12.7	5.0	7(<20)	<90	1.0	9.0	6	9
DZ23C13	V18	12.4	14.1	5.0	9(<25)	<110	1.0	10.0	7	9
DZ23C15	V19	13.8	15.6	5.0	11(<30)	<110	1.0	11.0	7	9
DZ23C16	V20	15.3	17.1	5.0	13(<40)	<170	1.0	12.0	8	9.5
DZ23C18	V21	16.8	19.1	5.0	18(<50)	<170	1.0	14.0	8	9.5
DZ23C20	V22	18.8	21.2	5.0	20(<50)	<220	1.0	15.0	8	10
DZ23C22	V23	20.8	23.3	5.0	25(<55)	<220	1.0	17.0	8	10
DZ23C24	V24	22.8	25.6	5.0	28(<80)	<220	1.0	18.0	8	10
DZ23C27	V25	25.1	28.9	5.0	30(<80)	<250	1.0	20.0	8	10
DZ23C30	V26	28.0	32.0	5.0	35(<80)	<250	1.0	22.5	8	10
DZ23C33	V27	31.0	35.0	5.0	40(<80)	<250	1.0	25.0	8	10
DZ23C36	V28	34.0	38.0	5.0	40(<90)	<250	1.0	27.0	8	10
DZ23C39	V29	37.0	41.0	5.0	50(<90)	<300	1.0	29.0	10	12
DZ23C43	V30	40.0	46.0	5.0	60(<100)	<700	1.0	32.0	10	12
DZ23C47	V31	44.0	50.0	5.0	70(<100)	<750	1.0	35.0	10	12
DZ23C51	V32	48.0	54.0	5.0	70(<100)	<750	1.0	38.0	10	12

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

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

Type No.	Marking	Zener Voltage ⁽¹⁾		Test Current	Dynamic Impedance(f = 1 kHz)		Test Current	Min. Reverse Voltage at I _R = 100 nA	Temperature Coefficient at Zener Voltage	
		V _Z @ I _{ZT} (V)		I _{ZT}	Z _{YT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	V _R	α _{VZ} at I _Z = 5 mA	
		Min.	Max.	(mA)	(Ω)	(Ω)	(mA)	(V)	(10 ⁻⁴ /°C)	
DZ23B2V7	V1	2.65	2.75	5.0	75(<83)	<500	1.0	-	-9	-4
DZ23B3V0	V2	2.94	3.06	5.0	80(<95)	<500	1.0	-	-9	-3
DZ23B3V3	V3	3.23	3.37	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23B3V6	V4	3.53	3.67	5.0	80(<95)	<500	1.0	-	-8	-3
DZ23B3V9	V5	3.82	3.98	5.0	80(<95)	<500	1.0	-	-7	-3
DZ23B4V3	V6	4.21	4.39	5.0	80(<95)	<500	1.0	-	-6	-1
DZ23B4V7	V7	4.61	4.79	5.0	70(<78)	<500	1.0	-	-5	2
DZ23B5V1	V8	5.00	5.20	5.0	30(<60)	<480	1.0	0.8	-3	4
DZ23B5V6	V9	5.49	5.71	5.0	10(<40)	<400	1.0	1.0	-2	6
DZ23B6V2	V10	6.08	6.32	5.0	4.8(<10)	<200	1.0	2.0	-1	7
DZ23B6V8	V11	6.66	6.94	5.0	4.5(<8)	<150	1.0	3.0	2	7
DZ23B7V5	V12	7.35	7.65	5.0	4(<7)	<50	1.0	5.0	-3	7
DZ23B8V2	V13	8.04	8.36	5.0	4.5(<7)	<50	1.0	6.0	4	7
DZ23B9V1	V14	8.92	9.28	5.0	4.8(<10)	<50	1.0	7.0	5	8
DZ23B10	V15	9.80	10.2	5.0	5.2(<15)	<70	1.0	7.5	5	8
DZ23B11	V16	10.8	11.2	5.0	6(<20)	<70	1.0	8.5	5	9
DZ23B12	V17	11.8	12.2	5.0	7(<20)	<90	1.0	9.0	6	9
DZ23B13	V18	12.7	13.3	5.0	9(<25)	<110	1.0	10.0	7	9
DZ23B15	V19	14.7	15.3	5.0	11(<30)	<110	1.0	11.0	7	9
DZ23B16	V20	15.7	16.3	5.0	13(<40)	<170	1.0	12.0	8	9.5
DZ23B18	V21	17.6	18.4	5.0	18(<50)	<170	1.0	14.0	8	9.5
DZ23B20	V22	19.6	20.4	5.0	20(<50)	<220	1.0	15.0	8	10
DZ23B22	V23	21.6	22.4	5.0	25(<55)	<220	1.0	17.0	8	10
DZ23B24	V24	23.5	24.5	5.0	28(<80)	<220	1.0	18.0	8	10
DZ23B27	V25	26.5	27.5	5.0	30(<80)	<250	1.0	20.0	8	10
DZ23B30	V26	29.4	30.6	5.0	35(<80)	<250	1.0	22.5	8	10
DZ23B33	V27	32.3	33.7	5.0	40(<80)	<250	1.0	25.0	8	10
DZ23B36	V28	35.3	36.7	5.0	40(<90)	<250	1.0	27.0	8	10
DZ23B39	V29	38.2	39.8	5.0	50(<90)	<300	1.0	29.0	10	12
DZ23B43	V30	42.1	43.9	5.0	60(<100)	<700	1.0	32.0	10	12
DZ23B47	V31	46.1	47.9	5.0	70(<100)	<750	1.0	35.0	10	12
DZ23B51	V32	50.0	52.0	5.0	70(<100)	<750	1.0	38.0	10	12

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