

DZ23C2V7~DZ23C51

ZENER DIODES

VOLTAGE 2.7 to 51 Volt **POWER** 0.3 Watt

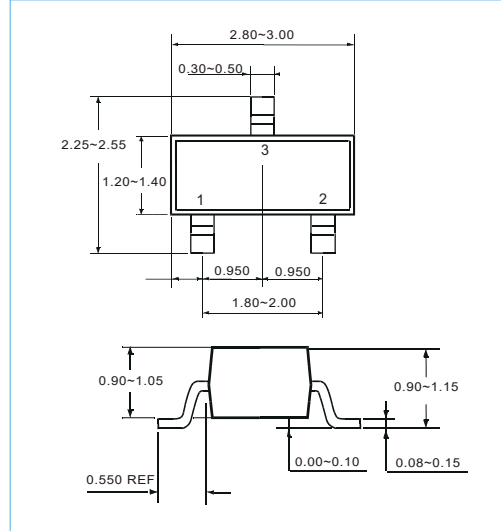
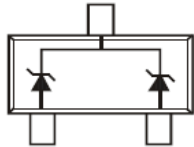
SOT-23 Unit:mm

FEATURES

- Dual zeners in common anode configuration.
- Ideally suited for automatic insertion.
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_d	300	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	417	$^{\circ}\text{C/W}$
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~+150	$^{\circ}\text{C}$

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ELECTRICAL CHARACTERISTICS @25°C

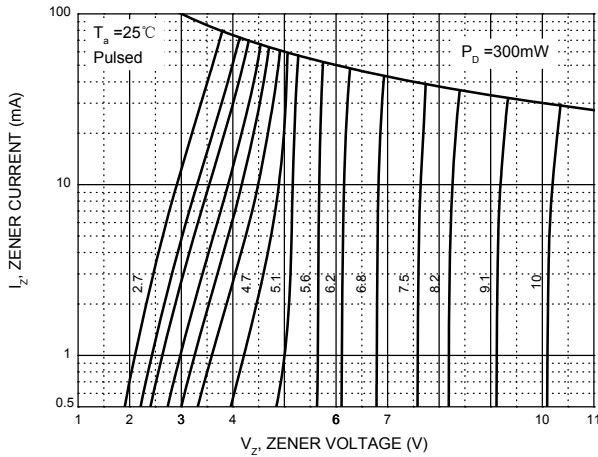
Type Number	Marking Code	Zener Voltage Range (Note 1)	Maximum Zener Impedance f = 1kHz		Typical Temperature Coefficient	Min. Reverse Voltage (Note 1)
		@ I _{ZT} = 5.0mA	Z _{ZT} @ I _{ZT} = 5.0mA	Z _{ZK} @ I _{ZK} = 1.0mA		@ I _R = 0.1μA
		V _Z (V)	Ω	Ω	TC (%/°C)	V _R (V)
DZ23C2V7	V1	2.5-2.9	83	500	-0.065	—
DZ23C3V0	V2	2.8-3.2	95	500	-0.060	—
DZ23C3V3	V3	3.1-3.5	95	500	-0.055	—
DZ23C3V6	V4	3.4-3.8	95	500	-0.055	—
DZ23C3V9	V5	3.7-4.1	95	500	-0.050	—
DZ23C4V3	V6	4.0-4.6	95	500	-0.035	—
DZ23C4V7	V7	4.4-5.0	78	500	-0.015	—
DZ23C5V1	V8	4.8-5.4	60	480	+0.005	0.8
DZ23C5V6	V9	5.2-6.0	40	400	+0.020	1.0
DZ23C6V2	VA	5.8-6.6	10	200	+0.030	2.0
DZ23C6V8	VB	6.4-7.2	8.0	150	+0.045	3.0
DZ23C7V5	VC	7.0-7.9	7.0	50	+0.050	5.0
DZ23C8V2	VD	7.7-8.7	7.0	50	+0.055	6.0
DZ23C9V1	VE	8.5-9.6	10	50	+0.065	7.0
DZ23C10	VF	9.4-10.6	15	70	+0.065	7.5
DZ23C11	VG	10.4-11.6	20	70	+0.070	8.5
DZ23C12	VH	11.4-12.7	20	90	+0.075	9.0
DZ23C13	VI	12.4-14.1	25	110	+0.080	10.0
DZ23C15	VJ	13.8-15.6	30	110	+0.080	11.0
DZ23C16	VK	15.3-17.1	40	170	+0.090	12.0
DZ23C18	VL	16.8-19.1	50	170	+0.090	14.0
DZ23C20	VM	18.8-21.2	50	220	+0.090	15.0
DZ23C22	VN	20.8-23.3	55	220	+0.090	17.0
DZ23C24	VO	22.8-25.6	80	220	+0.090	18.0
DZ23C27	VP	25.1-28.9	80	250	+0.090	20.0
DZ23C30	VQ	28-32	80	250	+0.090	22.5
DZ23C33	VR	31-35	80	250	+0.090	25.0
DZ23C36	VS	34-38	90	250	+0.090	27.0
DZ23C39	VT	37-41	90	300	+0.110	29.0
DZ23C43	VU	40-46	100	700	+0.110	32.0
DZ23C47	VV	44-50	100	750	+0.110	35.0
DZ23C51	VW	48-54	100	750	+0.110	38.0

Notes: 1. Short duration pulse test used to minimize self-heating effect.

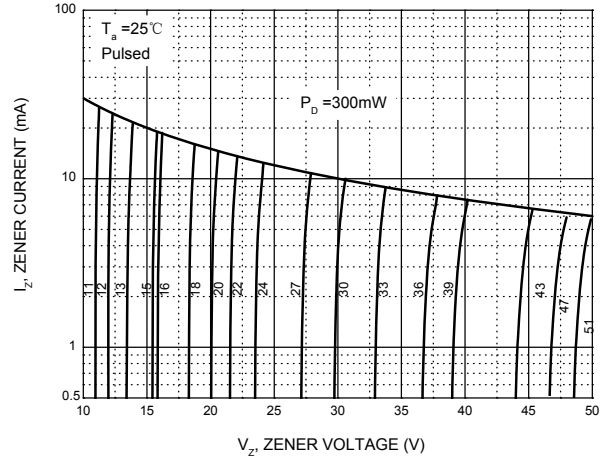
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RATING AND CHARACTERISTIC CURVES

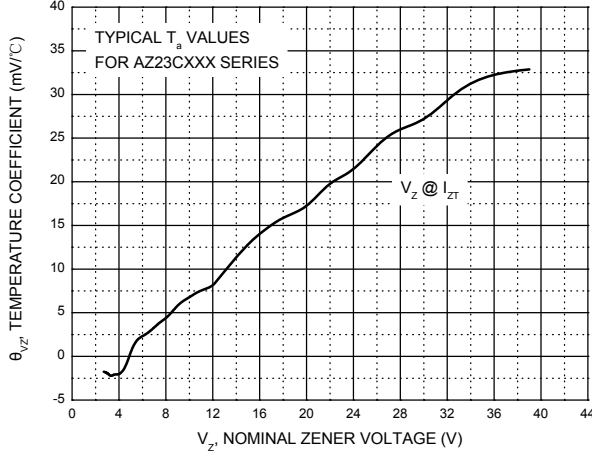
Zener Characteristics (V_z Up to 10 V)



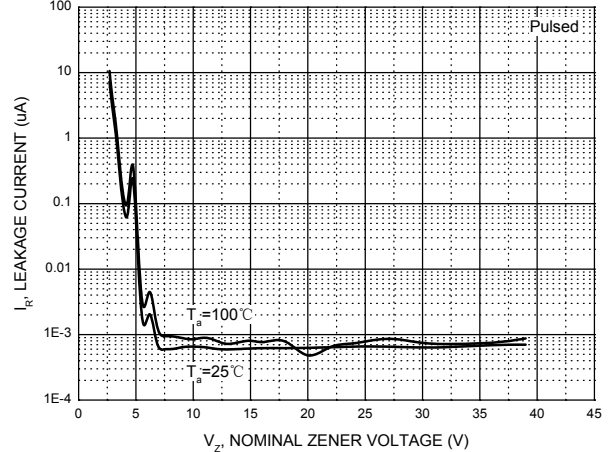
Zener Characteristics (11 V to 51 V)



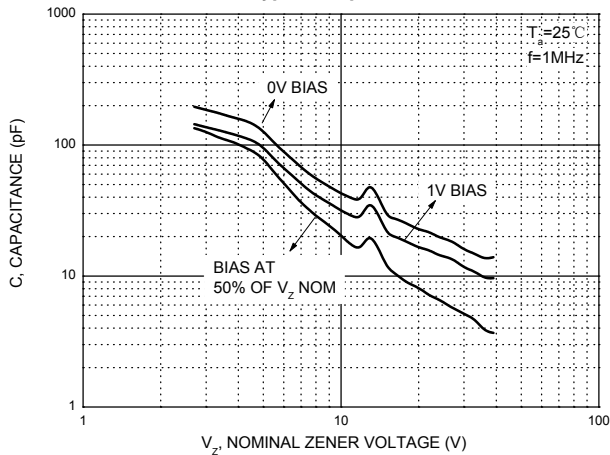
Temperature Coefficients



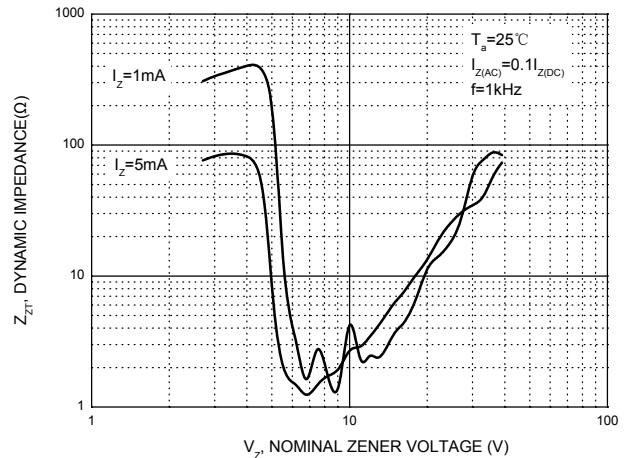
Typical Leakage Current



Typical Capacitance

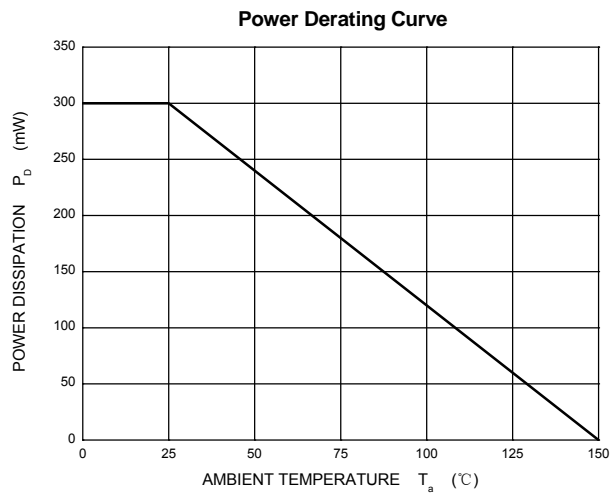


Effect of Zener Voltage on Zener Impedance



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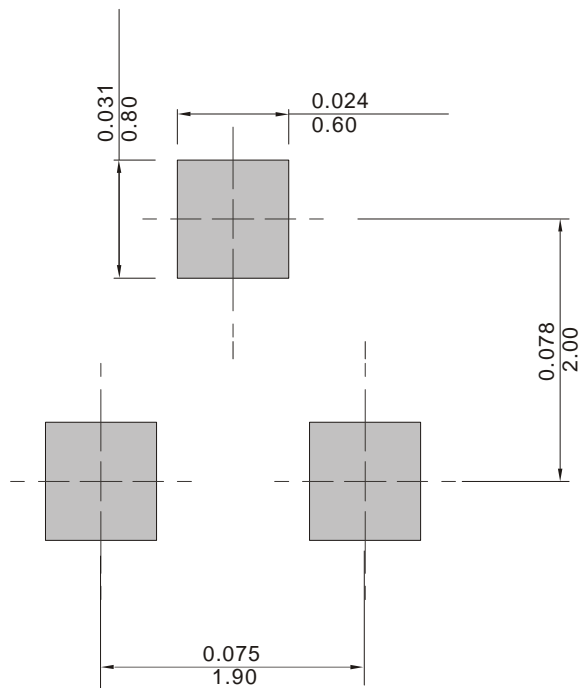


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MOUNTING PAD LAYOUT

SOT-23

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
DZ23C2V7~DZ23C51	SOT-23	7 Inch	3000