DZ23C2V7 - DZ23C51

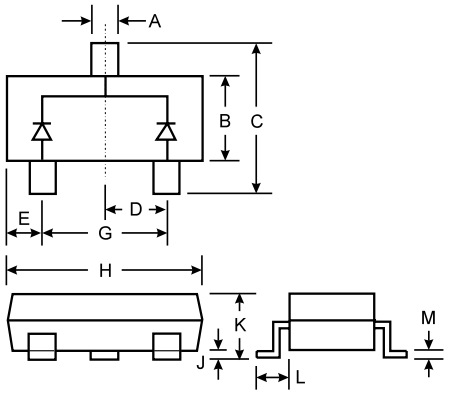
300mW DUAL SURFACE MOUNT ZENER DIODE

Features

- Dual Zeners in Common Cathode Configuration
- 300 mW Power Dissipation
- Ideally Suited for Automatic Insertion
- ΔV_Z For Both Diodes in One Case is $\leq 5\%$
- Common Anode Style Available See AZ Series

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Marking: Marking Code (See Table on Page 2)
- Approx. Weight: 0.008 grams
- Mounting Position: Any



SOT-23		
Dim	**Min**	**Max**
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P_d	300	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	420	K/W
Operating and Storage Temperature Range	T_j ,T_{STG}	–65 to +150	°C

Note: 1. Device on fiberglass substrate.
2. Tested with I_{ZT} current pulses. Pulse width = 5.0ms.

Electrical Characteristics

@T_A = 25°C unless otherwise noted

Type Number	Marking Code	Zener Voltage Range (Note 2)	Maximum Zener Impedance		Typical Temperature Coefficient	Min. Reverse Voltage
		@ I_{ZT} = 5.0mA	Z_{ZT} @ I_{ZT} = 5.0mA	Z_{ZK} @I_{ZK} = 1.0mA		@ I_R = 0.1µA
		V_Z (Volts)	Ohms	Ohms	T_C (%/°C)	V_R (Volts)
DZ23C2V7	V1/KV1	2.5-2.9	83	500	-0.065	—
DZ23C3V0	V2/KV2	2.8-3.2	95	500	-0.060	—
DZ23C3V3	V3/KV3	3.1-3.5	95	500	-0.055	—
DZ23C3V6	V4/KV4	3.4-3.8	95	500	-0.055	—
DZ23C3V9	V5/KV5	3.7-4.1	95	500	-0.050	—
DZ23C4V3	V6/KV6	4.0-4.6	95	500	-0.035	—
DZ23C4V7	V7/KV7	4.4-5.0	78	500	-0.015	—
DZ23C5V1	V8/KV8	4.8-5.4	60	480	+0.005	0.8
DZ23C5V6	V9/KV9	5.2-6.0	40	400	+0.020	1.0
DZ23C6V2	V10/KVA	5.8-6.6	10	200	+0.030	2.0
DZ23C6V8	V11/KVB	6.4-7.2	8.0	150	+0.045	3.0
DZ23C7V5	V12/KVC	7.0-7.9	7.0	50	+0.050	5.0
DZ23C8V2	V13/KVD	7.7-8.7	7.0	50	+0.055	6.0
DZ23C9V1	V14/KVE	8.5-9.6	10	50	+0.065	7.0
DZ23C10	V15/KVF	9.4-10.6	15	70	+0.065	7.5
DZ23C11	V16/KVG	10.4-11.6	20	70	+0.070	8.5
DZ23C12	V17/KVH	11.4-12.7	20	90	+0.075	9.0
DZ23C13	V18/KVI	12.4-14.1	25	110	+0.080	10.0
DZ23C15	V19/KVJ	13.8-15.6	30	110	+0.080	11.0
DZ23C16	V20/KVK	15.3-17.1	40	170	+0.090	12.0
DZ23C18	V21/KVL	16.8-19.1	50	170	+0.090	14.0
DZ23C20	V22/KVM	18.8-21.2	50	220	+0.090	15.0
DZ23C22	V23/KVN	20.8-23.3	55	220	+0.090	17.0
DZ23C24	V24/KVO	22.8-25.6	80	220	+0.090	18.0
DZ23C27	V25/KVP	25.1-28.9	80	250	+0.090	20.0
DZ23C30	V26/KVQ	28-32	80	250	+0.090	22.5
DZ23C33	V27/KVR	31-35	80	250	+0.090	25.0
DZ23C36	V28/KVS	34-38	90	250	+0.090	27.0
DZ23C39	V29/KVT	37-41	90	300	+0.110	29.0
DZ23C43	V30/KVU	40-46	100	700	+0.110	32.0
DZ23C47	V31/KVV	44-50	100	750	+0.110	35.0
DZ23C51	V32/KVW	48-54	100	750	+0.110	38.0

Note: 1. Device on fiberglass substrate.
2. Tested with I_{ZT} current pulses. Pulse width = 5.0ms.