

AZ23C27-51

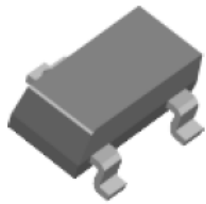
300 mw Dual Surface Mount Zener Diodes

Features

- SOT-23 surface mount package
- 300 mW power dissipation rating
- Ideally suited for automatic insertion
- ΔV_Z for both diodes in one case is $\leq 5\%$
- Common cathode style available see DZ series
- RoHS compliant package

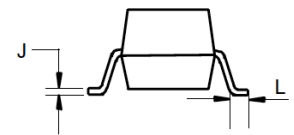
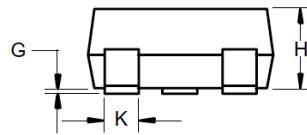
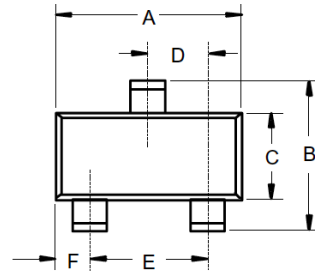
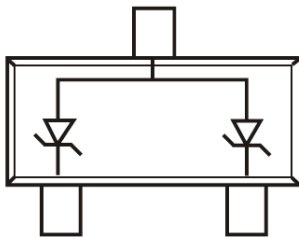
Packing & Order Information

3,000/Reel



RoHS
COMPLIANT

Graphic symbol



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	
L	.007	.020	.20	.50	

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATING (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Value	Unit
PD	Power Dissipation	On fiberglass substrate	300	mW
TJ=TSTG	Junction and storage temperature range		-55~+150	°C

Maximum Thermal Resistance

Symbol	Parameter	Test Conditions	Value	Unit
RthJS	Junction ambient	On fiberglass substrate	420	K/W

DC CHARACTERISTICS

Type Number	Marking Code	VZ	ZZT	ZZX	TC	VR
		V	Ω	Ω	%/°C	V
		@IZT=5mA	@IZT=5mA	@IZT=1mA		@IR=0.1uA
AZ23C2V7	KD1	2.5to2.9	83	500	-0.065	-
AZ23C3V0	KD2	2.8to3.2	95	500	-0.060	-
AZ23C3V3	KD3	3.1to3.5	95	500	-0.055	-
AZ23C3V6	KD4	3.4to3.8	95	500	-0.055	-
AZ23C3V9	KD5	3.7to4.1	95	500	-0.050	-
AZ23C4V3	KD6	4.0to4.6	95	500	-0.035	-
AZ23C4V7	KD7	4.4to5.0	78	500	-0.015	-
AZ23C5V1	KD8	4.8to5.4	60	480	+0.005	0.8
AZ23C5V6	KD9	5.2to6.0	40	400	+0.020	1.0
AZ23C6V2	KDA	5.8to6.6	10	200	+0.030	2.0
AZ23C6V8	KDB	6.4to7.2	8	150	+0.045	3.0
AZ23C7V5	KDC	7.0to7.9	7	50	+0.050	5.0
AZ23C8V2	KDD	7.7to8.7	7	50	+0.055	6.0
AZ23C9V1	KDE	8.5to9.6	10	70	+0.065	7.0
AZ23C10	KDF	9.4to10.6	15	70	+0.065	7.5
AZ23C11	KDG	10.4to11.6	20	70	+0.070	8.5
AZ23C12	KDH	11.4to12.7	20	90	+0.075	9.0
AZ23C13	KDI	12.4to14.1	25	110	+0.080	10.0
AZ23C15	KDJ	13.8to15.6	30	110	+0.080	11.0
AZ23C16	KDK	15.3to17.1	40	170	+0.090	12.0
AZ23C18	KDL	16.8to19.1	50	170	+0.090	14.0
AZ23C20	KDM	18.8to21.2	50	220	+0.090	15.0
AZ23C22	KDN	20.8to23.3	55	220	+0.090	17.0
AZ23C24	KDO	22.8to25.6	80	220	+0.090	18.0

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Type Number	Marking Code	VZ	ZZT	ZZX	TC	VR
		V	Ω	Ω	%/°C	V
		@ IZT=5mA	@ IZT=5mA	@ IZT=1mA		@ IR=0.1uA
AZ23C27	KDP	25.1to28.9	80	250	+0.090	20.0
AZ23C30	KDQ	28to32	80	250	+0.090	22.5
AZ23C33	KDR	31to35	80	250	+0.090	25.0
AZ23C36	KDS	34to38	90	250	+0.090	27.0
AZ23C39	KDT	37to41	90	300	+0.110	29.0
AZ23C43	KDU	40to46	100	700	+0.110	32.0
AZ23C47	KDV	44to50	100	750	+0.110	35.0
AZ23C51	KDW	48to54	100	750	+0.110	38.0

1) Device on fiberglass substrate

2) Tested with IZT current pulses.Pulse width=5ms.

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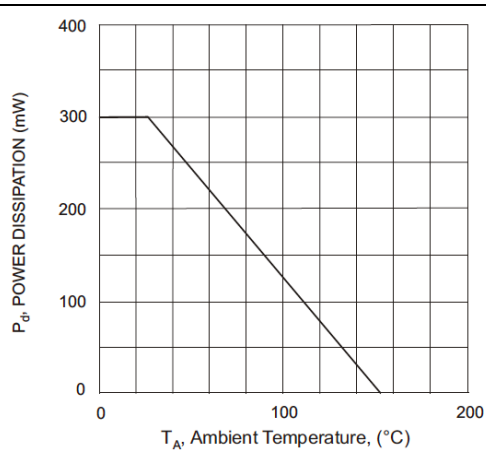


Fig 1 Power Derating Curve

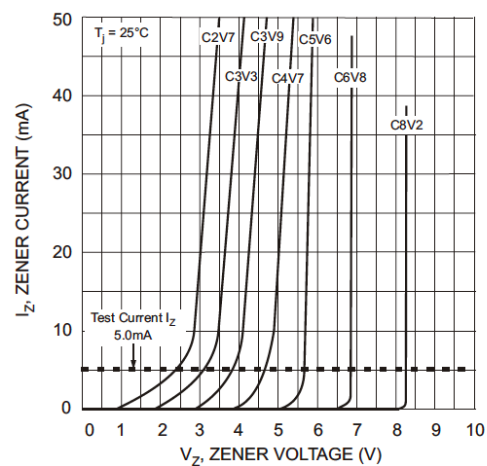


Fig. 2 Zener Breakdown Characteristics

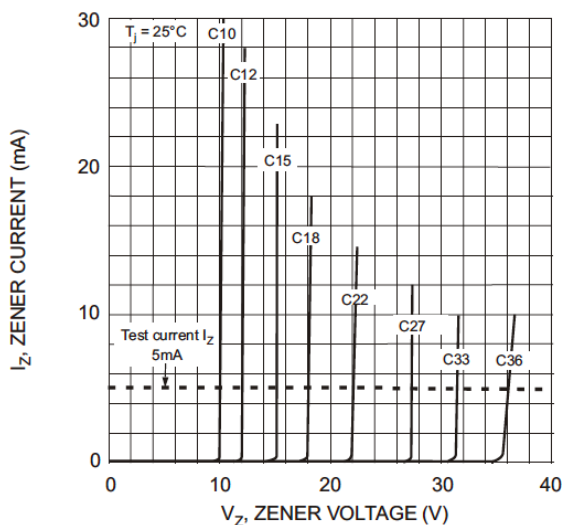


Fig. 3 Zener Breakdown Characteristics

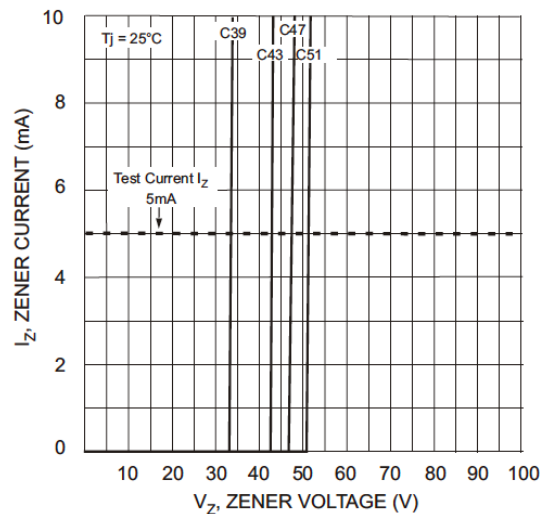


Fig. 4 Zener Breakdown Characteristics

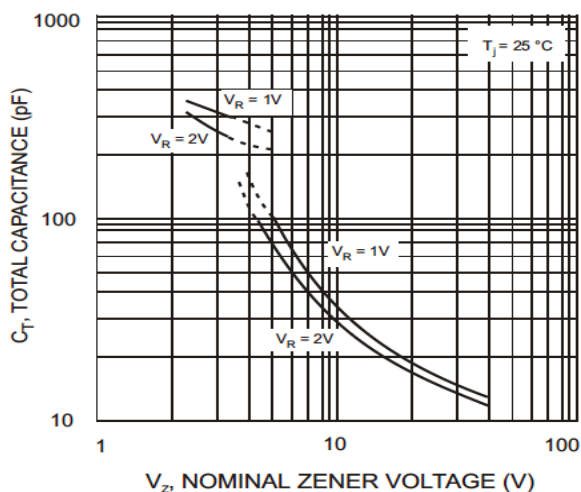


Fig. 5 Total Capacitance vs Nominal Zener Voltage

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