

Marking Information



K = SAT (Shanghai Assembly / Test Site) xx = Product Type Marking Code See Electrical Characteristics Table YM = Date Code Marking Y = Year (ex: I = 2021) M = Month (ex: 9 = September)

For DZ23C15-7-F only: Assembly/Test in Shanghai or Chuzhou M or \overline{M} = Month (ex: 9 = September)



C = CAT (Chengdu Assembly / Test Site) xx = Product Type Marking Code See Electrical Characteristics Table

YM = Date Code Marking

Y = Year (ex: I = 2021)M = Month (ex: 9 = September)

Date Code Kev

Year	2013		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Code	А			J	K	L	М	Ν	0	Р	R	S
Month	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	PD	300	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	R _{0JA}	417	°C/W
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150	٥C

Note: 5. Mounted on FR4 PC Board with recommended pad layout which can be found on our website at http://www.diodes.com.

Electrical Characteristics (@ T_A = +25°C, unless otherwise specified.)

Туре	Marking	Zener Voltage Range (Note 6)	Maxi Zener Im f = 1	mum Ipedance I kHz	Typical Temperature	Minimum Reverse Voltage (Note 6)
Number	Code	@ I _{ZT} = 5.0mA	Z _{ZT} @ I _{ZT} = 5.0mA	Z _{ZK} @ I _{ZK} = 1.0mA	Coefficient	@ I _R = 0.1µA
		V _Z (V)	Ω	Ω	TC (%/°C)	V _R (V)
DZ23C2V7	V1	2.5 to 2.9	83	500	-0.065	_
DZ23C3V0	V2	2.8 to 3.2	95	500	-0.060	—
DZ23C3V3	V3	3.1 to 3.5	95	500	-0.055	_
DZ23C3V6	V4	3.4 to 3.8	95	500	-0.055	—
DZ23C3V9	V5	3.7 to 4.1	95	500	-0.050	_
DZ23C4V3	V6	4.0 to 4.6	95	500	-0.035	_
DZ23C4V7	V7	4.4 to 5.0	78	500	-0.015	—
DZ23C5V1	V8	4.8 to 5.4	60	480	+0.005	0.8
DZ23C5V6	V9	5.2 to 6.0	40	400	+0.020	1.0
DZ23C6V2	VA	5.8 to 6.6	10	200	+0.030	2.0
DZ23C6V8	VB	6.4 to 7.2	8.0	150	+0.045	3.0
DZ23C7V5	VC	7.0 to 7.9	7.0	50	+0.050	5.0
DZ23C8V2	VD	7.7 to 8.7	7.0	50	+0.055	6.0
DZ23C9V1	VE	8.5 to 9.6	10	50	+0.065	7.0
DZ23C10	VF	9.4 to 10.6	15	70	+0.065	7.5
DZ23C11	VG	10.4 to 11.6	20	70	+0.070	8.5
DZ23C12	VH	11.4 to 12.7	20	90	+0.075	9.0
DZ23C13	VI	12.4 to 14.1	25	110	+0.080	10.0
DZ23C15	VJ	13.8 to 15.6	30	110	+0.080	11.0
DZ23C16	VK	15.3 to 17.1	40	170	+0.090	12.0
DZ23C18	VL	16.8 to 19.1	50	170	+0.090	14.0
DZ23C20	VM	18.8 to 21.2	50	220	+0.090	15.0
DZ23C22	VN	20.8 to 23.3	55	220	+0.090	17.0
DZ23C24	VO	22.8 to 25.6	80	220	+0.090	18.0
DZ23C27	VP	25.1 to 28.9	80	250	+0.090	20.0
DZ23C30	VQ	28 to 32	80	250	+0.090	22.5
DZ23C33	VR	31 to 35	80	250	+0.090	25.0
DZ23C36	VS	34 to 38	90	250	+0.090	27.0
DZ23C39	VT	37 to 41	90	300	+0.110	29.0
DZ23C43	VU	40 to 46	100	700	+0.110	32.0
DZ23C47	VV	44 to 50	100	750	+0.110	35.0
DZ23C51	VW	48 to 54	100	750	+0.110	38.0

Note: 6. Short duration pulse test used to minimize self-heating effect.













Fig. 4 Typical Zener Breakdown Characteristics



Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.



SOT23					
Dim	Min	Max	Тур		
Α	0.37	0.51	0.40		
В	1.20	1.40	1.30		
С	2.30	2.50	2.40		
D	0.89	1.03	0.915		
F	0.45	0.60	0.535		
G	1.78	2.05	1.83		
Н	2.80	3.00	2.90		
J	0.013	0.10	0.05		
К	0.890	1.00	0.975		
K1	0.903	1.10	1.025		
L	0.45	0.61	0.55		
L1	0.25	0.55	0.40		
M	0.085	0.150	0.110		
а	0°	8°			
All Dimensions in mm					

For DZ23C15-7-F only:

SOT23 (Standard)

SOT23



SOT23 (Standard)					
Dim	Min	Max	Тур		
Α	0.90	1.15	1.025		
A1	0.00	0.10	0.05		
A2	0.85	1.10	0.975		
b	0.30	0.51	0.40		
С	0.080	0.202	0.11		
D	2.80	3.00	2.90		
E	2.25	2.55	2.40		
E1	1.20	1.40	1.30		
е	0.89	1.03	0.915		
e1	1.78	2.05	1.83		
F	0.40	0.60	0.535		
L1	0.45	0.61	0.55		
L	0.25	0.55	0.40		
а	0°	8°			
All Dimensions in mm					



Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.





Dimensions	Value (in mm)
С	2.0
Х	0.8
X1	1.35
Y	0.9
Y1	2.9



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