Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BZD27C6V2P THRU BZD27C200P

0.8 Watt Zener Diode 6.2V - 200V Volts

Features

- High Surge Capability
- Low profile surface-mount package.
- Zener and TVS specification.
- Ideally Suited for Automatic Assembly
- Standard V_Z Tolerance is +/- 5%
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

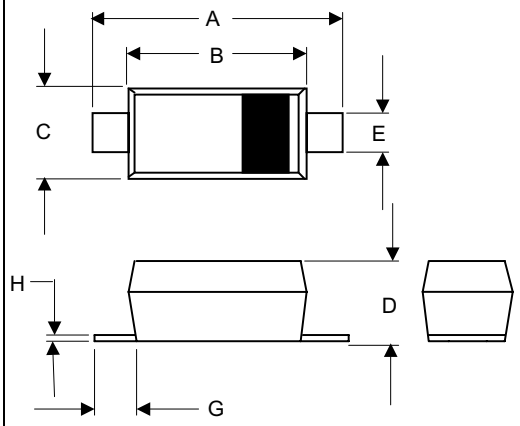
Maximum Ratings

- Storage Temperature Range(T_{STG}): -65℃ to +175℃
- Operating Temperature Range(T_j): -65℃ to +175℃

	Symbol	Value	Units
Zener Curren	I_{ZM}	Pd/Vz	mA
Power Dissipation @T_L=105°C @T_A=25°C	P_{tot}	2.3 0.8	W
Forward Voltage@I_F = 200mA	VF	1.2	V
Junction to Lead	R_{thJL}	30	°C/W
Thermal resistance	R_{thJA}	188	°C/W
Non-repetitive peak pulse power dissipation with 100μs square pulse	P_{ZSM}	300	W
Non-repetitive peak pulse power dissipation with 10/1000μs waveform	P_{RSM}	150	W

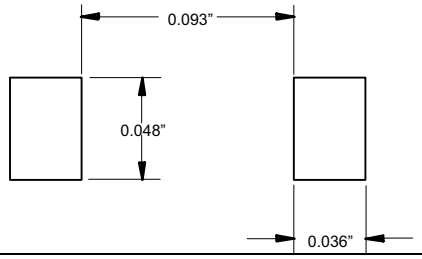
Note :1.High Temperature Solder Exemptions Applied,See EU Directive Annex 7.

SOD-123FL



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

SUGGESTED SOLDER PAD LAYOUT



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Electrical Characteristics @ 25°C Unless Otherwise Specified

When used as voltage regulator diodes

Type	Marking Code	Working Voltage V_Z (V) @ I_Z			Differential Resistance r_{dif} (Ω) @ I_Z		Temperature Coefficient α_Z @ I_Z (%/°C)		Test Current	Reverse Current at Reverse Voltage	
		Min.	Nom.	Max.	Typ.	Max.	Min.	Max.	I_{ZT} (mA)	I_R(μA)Max	V_R (V)
BZD27C6V2P	B01	5.8	6.2	6.6	2	3	–0.01	0.06	100	5	2
BZD27C6V8P	B02	6.4	6.8	7.2	1	3	0.00	0.07	100	10	3
BZD27C7V5P	B03	7.0	7.5	7.9	1	2	0.00	0.07	100	50	3
BZD27C8V2P	B04	7.7	8.2	8.7	1	2	0.03	0.08	100	10	3
BZD27C9V1P	B05	8.5	9.1	9.6	2	4	0.03	0.08	50	10	5
BZD27C10P	B06	9.4	10	10.6	2	4	0.05	0.09	50	7	7.5
BZD27C11P	B07	10.4	11	11.6	4	7	0.05	0.10	50	4	8.2
BZD27C12P	B08	11.4	12	12.7	4	7	0.05	0.10	50	3	9.1
BZD27C13P	B09	12.4	13	14.1	5	10	0.05	0.10	50	2	10
BZD27C15P	B10	13.8	15	15.6	5	10	0.05	0.10	50	1	11
BZD27C16P	B11	15.3	16	17.1	6	15	0.06	0.11	25	1	12
BZD27C18P	B12	16.8	18	19.1	6	15	0.06	0.11	25	1	13
BZD27C20P	B13	18.8	20	21.2	6	15	0.06	0.11	25	1	15
BZD27C22P	B14	20.8	22	23.3	6	15	0.06	0.11	25	1	16
BZD27C24P	B15	22.8	24	25.6	7	15	0.06	0.11	25	1	18
BZD27C27P	B16	25.1	27	28.9	7	15	0.06	0.11	25	1	20
BZD27C30P	B17	28	30	32	8	15	0.06	0.11	25	1	22
BZD27C33P	B18	31	33	35	8	15	0.06	0.11	25	1	24
BZD27C36P	B19	34	36	38	21	40	0.06	0.11	10	1	27
BZD27C39P	B20	37	39	41	21	40	0.06	0.11	10	1	30
BZD27C43P	B21	40	43	46	24	45	0.07	0.12	10	1	33
BZD27C47P	B22	44	47	50	24	45	0.07	0.12	10	1	36

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

When used as voltage regulator diodes

Type	Marking Code	Working Voltage V_Z (V) @ I_Z Min.	Nom.	Max.	Differential Resistance r_{dif} (Ω) @ I_Z Typ.	Max.	Temperature Coefficient α_Z @ I_Z (%/°C) Min.	Max.	Test Current I_{ZT} (mA)	Reverse Current at Reverse Voltage I_R(μA)Max	V_R (V)
BZD27C51P	B23	48	51	54	25	60	0.07	0.12	10	1	39
BZD27C56P	B24	52	56	60	25	60	0.07	0.12	10	1	43
BZD27C62P	B25	58	62	66	25	80	0.08	0.13	10	1	47
BZD27C68P	B26	64	68	72	25	80	0.08	0.13	10	1	51
BZD27C75P	B27	70	75	79	30	100	0.08	0.13	10	1	56
BZD27C82P	B28	77	82	87	30	100	0.08	0.13	10	1	62
BZD27C91P	B29	85	91	96	60	200	0.09	0.13	5	1	68
BZD27C100P	B30	94	100	106	60	200	0.09	0.13	5	1	75
BZD27C110P	B31	104	110	116	80	250	0.09	0.13	5	1	82
BZD27C120P	B32	114	120	127	80	250	0.09	0.13	5	1	91
BZD27C130P	B33	124	130	141	110	300	0.09	0.13	5	1	100
BZD27C150P	B34	138	150	156	130	300	0.09	0.13	5	1	110
BZD27C160P	B35	153	160	171	150	350	0.09	0.13	5	1	120
BZD27C180P	B36	168	180	191	180	400	0.09	0.13	5	1	130
BZD27C200P	B37	188	200	212	200	500	0.09	0.13	5	1	150

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

When used as transient suppressor diodes

Type	Rev. Breakdown Voltage $V_{(BR)R}$ (V) at I_{test} Min.	Temperature Coefficient α_Z @ I_{test} (%/°C) Min.	Max.	Test Current I_{test} (mA)	Clamping Voltage V_C (V) Max.	at I_{RSM} (A)(1)	Reverse Current at Stand-Off Voltage I_R (μA) Max.	at V_{WM} (V)
BZD27C7V5P	7.0	0.00	0.07	100	11.3	13.3	1500	6.2
BZD27C8V2P	7.7	0.03	0.08	100	12.3	12.2	1200	6.8
BZD27C9V1P	8.5	0.03	0.08	50	13.3	11.3	100	7.5
BZD27C10P	9.4	0.05	0.09	50	14.8	10.1	20	8.2
BZD27C11P	10.4	0.05	0.10	50	15.7	9.6	5	9.1
BZD27C12P	11.4	0.05	0.10	50	17.0	8.8	5	10
BZD27C13P	12.4	0.05	0.10	50	18.9	7.9	5	11
BZD27C15P	13.8	0.05	0.10	50	20.9	7.2	5	12
BZD27C16P	15.3	0.06	0.11	25	22.9	6.6	5	13
BZD27C18P	16.8	0.06	0.11	25	25.6	5.9	5	15
BZD27C20P	18.8	0.06	0.11	25	28.4	5.3	5	16
BZD27C22P	20.8	0.06	0.11	25	31.0	4.8	5	18
BZD27C24P	22.8	0.06	0.11	25	33.8	4.4	5	20
BZD27C27P	25.1	0.06	0.11	25	38.1	3.9	5	22
BZD27C30P	28	0.06	0.11	25	42.2	3.6	5	24
BZD27C33P	31	0.06	0.11	25	46.2	3.2	5	27
BZD27C36P	34	0.06	0.11	10	50.1	3.0	5	30
BZD27C39P	37	0.06	0.11	10	54.1	2.8	5	33
BZD27C43P	40	0.07	0.12	10	60.7	2.5	5	36
BZD27C47P	44	0.07	0.12	10	65.5	2.3	5	39
BZD27C51P	48	0.07	0.12	10	70.8	2.1	5	43
BZD27C56P	52	0.07	0.12	10	78.6	1.9	5	47
BZD27C62P	58	0.08	0.13	10	86.5	1.7	5	51
BZD27C68P	64	0.08	0.13	10	94.4	1.6	5	56
BZD27C75P	70	0.08	0.13	10	103.5	1.5	5	62
BZD27C82P	77	0.08	0.13	10	114	1.3	5	68
BZD27C91P	85	0.09	0.13	5	126	1.2	5	75
BZD27C100P	94	0.09	0.13	5	139	1.1	5	82
BZD27C110P	104	0.09	0.13	5	152	1.0	5	91
BZD27C120P	114	0.09	0.13	5	167	0.90	5	100
BZD27C130P	124	0.09	0.13	5	185	0.81	5	110
BZD27C150P	138	0.09	0.13	5	204	0.73	5	120
BZD27C160P	153	0.09	0.13	5	224	0.67	5	130
BZD27C180P	168	0.09	0.13	5	249	0.60	5	150
BZD27C200P	188	0.09	0.13	5	276	0.54	5	160

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

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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