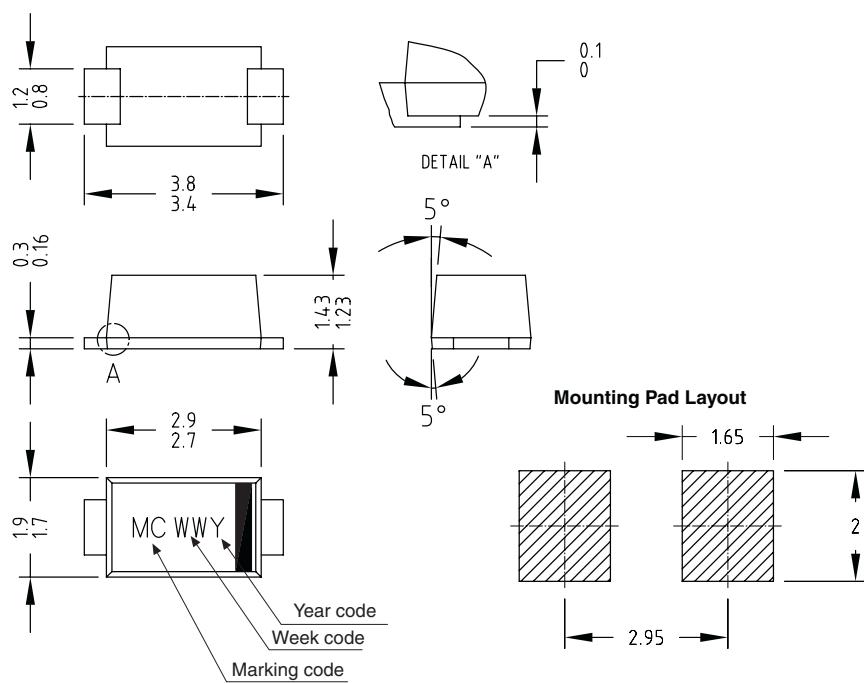


1 W Surface Mount Zener Diode

Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
BZD27C11P TRTB	TRTB	13" diameter tape and reel	7,500	0.0196
BZD27C11P TRTS	TRTS	8" diameter tape and reel	1,800	0.0196

Package Outline Dimensions: (mm) DO-219AA (M1F)



1 W Surface Mount Zener Diode

Ratings and Characteristics (Ta 25 °C unless otherwise noted)

Device	Device Marking Code	Working Voltage (Note 1)		Differential Resistance		Temperature Coefficient		Test	Reverse Current @ Reverse Voltage	
		V _Z @ I _{ZT}		r _{dif} @ I _Z		ALPH _Z @ I _Z			Current	μA
		V		Ω		% / °C		I _{ZT}	mA	V _R
		Min.	Max.	typ	Max.	Min.	Max.		mA	V
BZD27C11P	Z11	10.4	11.6	4.0	7	0.05	0.10	50	4.0	8.2
BZD27C12P	Z12	11.4	12.7	4.0	7	0.05	0.10	50	3.0	9.1
BZD27C13P	Z13	12.4	14.1	5.0	10	0.05	0.10	50	2.0	10
BZD27C15P	Z15	13.8	15.6	5.0	10	0.05	0.10	25	1.0	11
BZD27C16P	Z16	15.3	17.1	6.0	15	0.06	0.11	25	1.0	12
BZD27C18P	Z18	16.8	19.1	6.0	15	0.06	0.11	25	1.0	13
BZD27C24P	Z24	22.8	25.6	7.0	15	0.06	0.11	25	1.0	18
BZD27C27P	Z27	25.1	28.9	7.0	15	0.06	0.11	25	1.0	20
BZD27C33P	Z33	31	35	8.0	15	0.06	0.11	25	1.0	24
BZD27C36P	Z36	34	38	21	40	0.06	0.11	10	1.0	27
BZD27C39P	Z39	37	41	21	40	0.06	0.11	10	1.0	30
BZD27C43P	Z43	40	46	24	45	0.07	0.12	10	1.0	33
BZD27C47P	Z47	44	50	24	45	0.07	0.12	10	1.0	36
BZD27C62P	Z62	58	66	25	80	0.08	0.13	10	1.0	47
BZD27C68P	Z68	64	72	25	80	0.08	0.13	10	1.0	51
BZD27C100P	10Z	94	106	60	200	0.09	0.13	4	1.0	75
BZD27C120P	12Z	114	127	150	300	0.09	0.13	4	1.0	91
BZD27C200P	20Z	188	212	350	750	0.09	0.13	4	1.0	150
BZD27C220P	22Z	208	233	430	900	0.09	0.13	4	1.0	160

Notes: 1. Pulse test: tp ≤ 5ms.

- Electrical characteristics when used as voltage regulator diodes

1 W Surface Mount Zener Diode

Ratings and Characteristics (Ta 25 °C unless otherwise noted)

Device	Rev.	Test Current	Temperature Coefficient		Clamping Voltage		Reverse Current@ Stand-Off Voltage	
	Breakdown Voltage		ALPHz@Itest	Vc	@I _{RSM} (Note 1)	I _R	@V _{WM}	
	V(BR)@Itest	Itest	%/°C	V	A	uA	V	
	V	mA	Min.	Max	Max.		Max.	
BZD27C11P	10.4	50	0.05	0.10	15.7	9.6	5	9.1
BZD27C12P	11.4	50	0.05	0.10	17	8.8	5	10
BZD27C13P	12.4	50	0.05	0.10	18.9	7.9	5	11
BZD27C15P	13.8	50	0.05	0.10	20.9	7.2	5	12
BZD27C16P	15.3	25	0.06	0.11	22.9	6.6	5	13
BZD27C18P	16.8	25	0.06	0.11	25.6	5.9	5	15
BZD27C24P	22.8	25	0.06	0.11	33.8	4.4	5	20
BZD27C27P	25.1	25	0.06	0.11	38.1	3.9	5	22
BZD27C30P	28	25	0.06	0.11	42.2	3.6	5	24
BZD27C33P	31	25	0.06	0.11	46.2	3.2	5	27
BZD27C36P	34	10	0.06	0.11	50.1	3	5	30
BZD27C39P	37	10	0.06	0.11	54.1	2.8	5	33
BZD27C43P	40	10	0.07	0.12	60.7	2.5	5	36
BZD27C47P	44	10	0.07	0.12	65.5	2.3	5	39
BZD27C51P	48	10	0.07	0.12	70.8	2.1	5	43
BZD27C62P	58	10	0.08	0.13	86.5	1.7	5	51
BZD27C68P	64	10	0.08	0.13	94.4	1.6	5	56
BZD27C75P	70	10	0.08	0.13	103.5	1.5	5	62
BZD27C100P	94	5	0.09	0.13	139	1.1	5	82
BZD27C120P	114	5	0.09	0.13	152	0.65	5	100
BZD27C180P	168	5	0.09	0.13	229	0.43	5	150
BZD27C200P	188	5	0.09	0.13	254	0.39	5	160
BZD27C220P	208	5	0.09	0.13	279	0.35	5	176

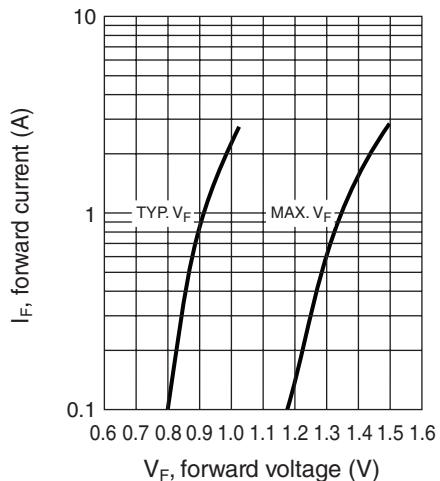
Notes: 1. Non-repetitive peak reverse current in accordance with "IEC 60-1, Section 8" (10/1000 µs pulse)

- Electrical characteristics when used as protection diodes

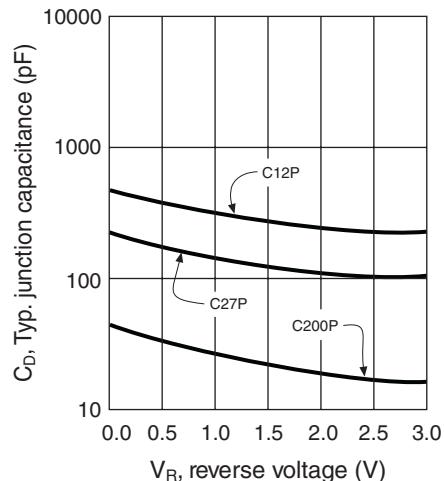
1 W Surface Mount Zener Diode

Ratings and Characteristics (Ta 25 °C unless otherwise noted)

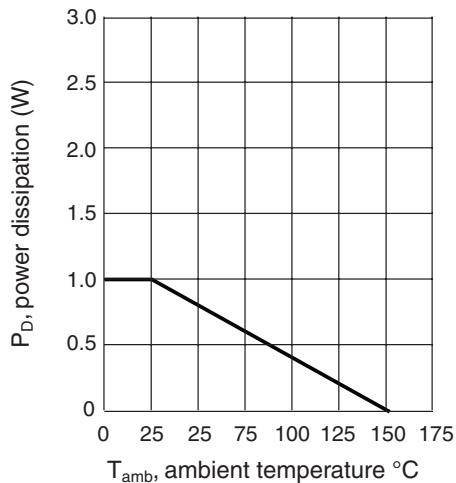
FORWARD CURRENT vs FORWARD VOLTAGE



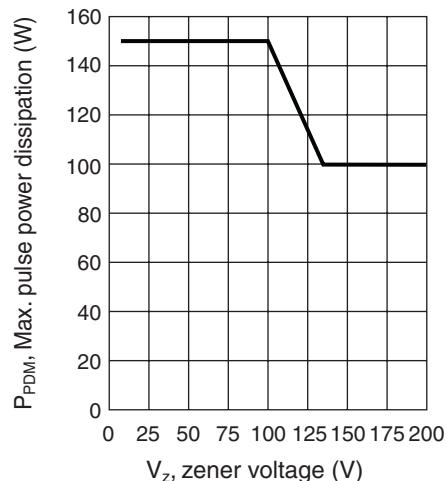
TYP. DIODE CAPACITANCE vs REVERSE VOLTAGE



POWER DISSIPATION vs AMBIENT TEMPERATURE



MAXIMUM PULSE POWER DISSIPATION vs ZENER VOLTAGE



1 W Surface Mount Zener Diode

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