

# CZRM27C3V6P THRU C200P

**Features**

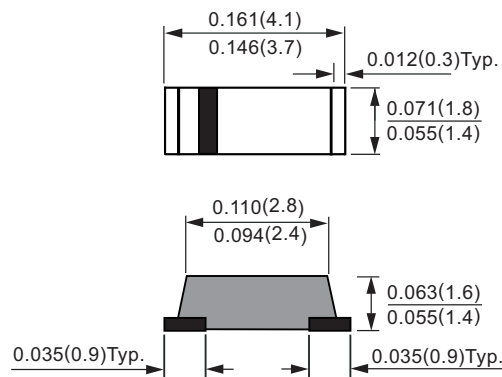
- ★ Low profile surface-mount package
- ★ Zener and surge current specification
- ★ Low leakage current
- ★ Excellent stability

**Mechanical Data**

- ★ Case: Molded plastic MINI-SMA
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Solderable per MIL-STD-202, method 208 guaranteed
- ★ Polarity: cathode band
- ★ Mounting position: Any
- ★ Weight: 0.04gram(approx.)

**Power Dissipation 0.8Watts**

**MINI-SMA**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	VALUE	Units
Forward voltage IF=0.2A	1.2	V
Power Dissipation TA=25°C ( Note ) TL=80°C	0.8 2.3	W
Non-repetitive peak pulse power dissipation TJ=25°C 100us square pulse	300	W
Non-repetitive peak pulse power dissipation TJ=25°C 10/1000us waveform (CZRM27C7V5P to C100P)	150	W
Non-repetitive peak pulse power dissipation TJ=25°C 10/1000us waveform (CZRM27C110P to C200P)	100	W
Thermal resistance junction to lead ambient ( Note )	30 180	KW
Operating junction and Storage Temperature Range	150 / -55 to +150	°C

NOTES : Mounted on epoxy-glass PCB with 3 x 3 mm Cu pads ( ≥ 40um thick)

**CZRM27C6V8P THRU CZRM27C200P**

Application	Case	Part No.	Electrical Characteristic (Ta=25°C)							Temp. Coefficient	
			Vzmin	Vzmax	Iz	Zzmax	Zztyp	IR(μA) Max.	min	max	
			(V)	(V)	(mA)	(Ohm)	(Ohm)	VR(V)	%/°C	%/°C	
0.8W Zener Diode	Mini-SMA	CZRM27C6V8P	6.4	7.2	100	3	1	10	3.0	0	0.07
		CZRM27C7V5P	7.0	7.9	100	2	1	10	3.0	0	0.07
		CZRM27C8V2P	7.7	8.7	100	2	1	10	3.0	0.03	0.08
		CZRM27C9V1P	8.5	9.6	50	4	2	10	5.0	0.03	0.08
		CZRM27C10P	9.4	10.6	50	4	2	7	7.5	0.05	0.09
		CZRM27C11P	10.4	11.6	50	7	4	4	8.2	0.05	0.1
		CZRM27C12P	11.4	12.7	50	7	4	3	9.1	0.05	0.1
		CZRM27C13P	12.4	14.1	50	10	5	2	10	0.05	0.1
		CZRM27C15P	13.8	15.6	50	10	5	1	11	0.05	0.1
		CZRM27C16P	15.3	17.1	25	15	6	1	12	0.06	0.11
		CZRM27C18P	16.8	19.1	25	15	6	1	13	0.06	0.11
		CZRM27C20P	18.8	21.2	25	15	6	1	15	0.06	0.11
		CZRM27C22P	20.8	23.3	25	15	6	1	16	0.06	0.11
		CZRM27C24P	22.8	25.6	25	15	7	1	18	0.06	0.11
		CZRM27C27P	25.1	28.9	25	15	7	1	20	0.06	0.11
		CZRM27C30P	28.0	32	25	15	8	1	22	0.06	0.11
		CZRM27C33P	31	35	25	15	8	1	24	0.06	0.11
		CZRM27C36P	34	38	10	40	21	1	27	0.06	0.11
		CZRM27C39P	37	41	10	40	21	1	30	0.06	0.11
		CZRM27C43P	40	46	10	45	24	1	33	0.07	0.12
		CZRM27C47P	44	50	10	45	24	1	36	0.07	0.12
		CZRM27C51P	48	54	10	60	25	1	39	0.07	0.12
		CZRM27C56P	52	60	10	60	25	1	43	0.07	0.12
		CZRM27C62P	58	66	10	80	25	1	47	0.08	0.13
		CZRM27C68P	64	72	10	80	25	1	51	0.08	0.13
		CZRM27C75P	70	79	10	100	30	1	56	0.08	0.13
		CZRM27C82P	77	87	10	100	30	1	62	0.08	0.13
		CZRM27C91P	85	96	5	200	60	1	68	0.08	0.13
		CZRM27C100P	94	106	5	200	60	1	75	0.09	0.13
		CZRM27C110P	104	116	5	250	80	1	82	0.09	0.13
CZRM27C120P	114	127	5	250	80	1	91	0.09	0.13		
CZRM27C130P	124	141	5	300	110	1	100	0.09	0.13		
CZRM27C150P	138	156	5	300	130	1	110	0.09	0.13		
CZRM27C160P	153	171	5	350	150	1	120	0.09	0.13		
CZRM27C180P	168	191	5	400	180	1	130	0.09	0.13		
CZRM27C200P	188	212	5	500	200	1	150	0.09	0.13		

C:5% B:2% A:1%

**RATINGS AND CHARACTERISTIC CURVES CZRM27C6V8P THRU CZRM27C200P**

FIG.1 - FORWARD CURRENT VS. FORWARD VOLTAGE

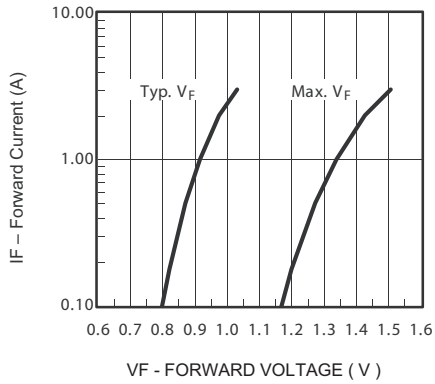


FIG.2 - TYP. DIODE CAPACITANCE VS. REVERSE VOLTAGE

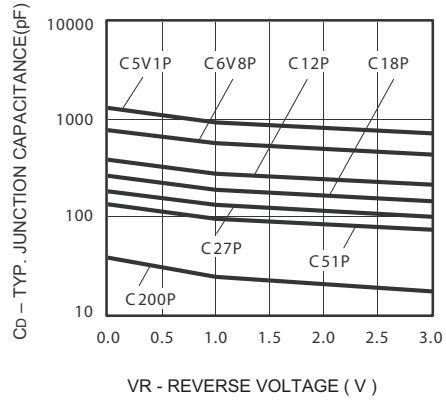


FIG.3 - POWER DISSIPATION VS. AMBIENT TEMPERATURE

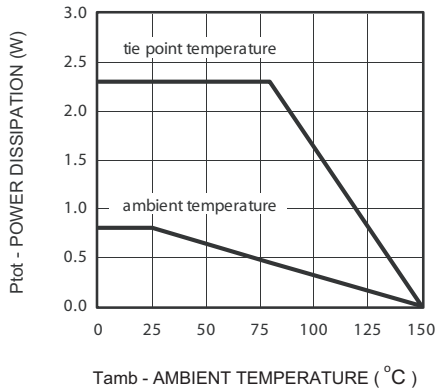


FIG.4 - MAXIMUM PULSE POWER DISSIPATION VS. ZENER VOLTAGE

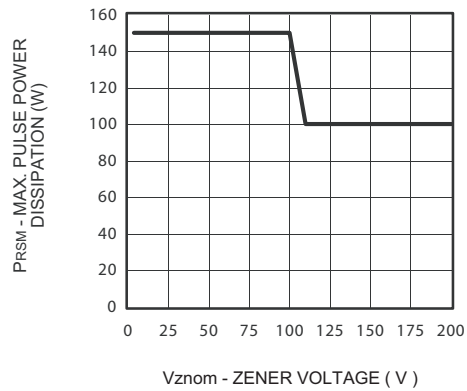


FIG.5 - Non-REPETITIVE PEAK REVERSE CURRENT PULSE DEFINITION

