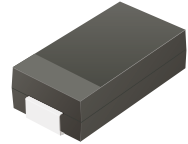
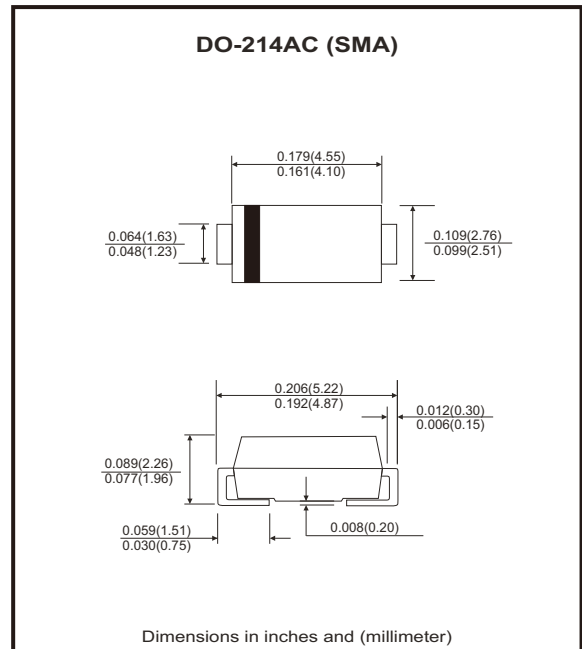


CZRA5920B-HF Thru. CZRA5956B-HF**Voltage: 6.2 to 200 Volts****Power: 1.5 Watts****RoHS Device****Halogen Free****Features**

- Glass passivated chip.
- Low leakage.
- Built-in strain relief.
- Low inductance.
- High peak reverse power dissipa.
- For use in stabilizing and clipping circuits with high power.

Mechanical data

- Case: DO-214AC(SMA), Molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode.
- Mounting position: Any.

**Circuit Diagram****Maximum Rating** ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC power dissipation at $T_L = 75^{\circ}\text{C}$	P_D	1.5	W
Maximun forward voltage at $I_F=200\text{mA}$	V_F	1.5	V
Junction temperature range	T_J	-55 to +175	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +175	$^{\circ}\text{C}$

Electrical Characteristics (TA=25°C unless otherwise noted)

Part Number	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Marking Code
	Vz @ IZT	IZT	ZzT @ IZT	Zzk @ Izk	Izk	Ir @ VR		IZM	
	(V)	(mA)	(Ohm)	(Ohm)	(mA)	(μA)	(V)	(mA)	
CZRA5920B-HF	6.2	60.5	2.0	200	1.0	2.5	4.0	120	920B
CZRA5921B-HF	6.8	55.1	2.5	200	1.0	2.5	5.2	220	921B
CZRA5922B-HF	7.5	50.0	3.0	400	0.5	2.5	6.0	200	922B
CZRA5923B-HF	8.2	45.7	3.5	400	0.5	2.5	6.5	182	923B
CZRA5924B-HF	9.1	41.2	4.0	500	0.5	2.5	7.0	164	924B
CZRA5925B-HF	10	37.5	4.5	500	0.25	2.5	8.0	150	925B
CZRA5926B-HF	11	34.1	5.5	550	0.25	0.5	8.4	136	926B
CZRA5927B-HF	12	31.2	6.5	550	0.25	0.5	9.1	125	927B
CZRA5928B-HF	13	28.8	7.0	550	0.25	0.5	9.9	115	928B
CZRA5929B-HF	15	25.0	9.0	600	0.25	0.5	11.4	100	929B
CZRA5930B-HF	16	23.4	10	600	0.25	0.5	12.2	93	930B
CZRA5931B-HF	18	20.8	12	650	0.25	0.5	13.7	83	931B
CZRA5932B-HF	20	18.7	14	650	0.25	0.5	15.2	75	932B
CZRA5933B-HF	22	17.0	18	650	0.25	0.5	16.7	68	933B
CZRA5934B-HF	24	15.6	19	700	0.25	0.5	18.2	62	934B
CZRA5935B-HF	27	13.9	23	700	0.25	0.5	20.6	55	935B
CZRA5936B-HF	30	12.5	26	750	0.25	0.5	22.8	50	936B
CZRA5937B-HF	33	11.4	33	800	0.25	0.5	25.1	45	937B
CZRA5938B-HF	36	10.4	38	850	0.25	0.5	27.4	41	938B
CZRA5939B-HF	39	9.6	45	900	0.25	0.5	29.7	38	939B
CZRA5940B-HF	43	8.7	53	950	0.25	0.5	32.7	34	940B
CZRA5941B-HF	47	8.0	67	1000	0.25	0.5	35.8	31	941B
CZRA5942B-HF	51	7.3	70	1100	0.25	0.5	38.8	29	942B
CZRA5943B-HF	56	6.7	86	1300	0.25	0.5	42.6	26	943B
CZRA5944B-HF	62	6.0	100	1500	0.25	0.5	47.1	24	944B
CZRA5945B-HF	68	5.5	120	1700	0.25	0.5	51.7	22	945B
CZRA5946B-HF	75	5.0	140	2000	0.25	0.5	56.0	20	946B
CZRA5947B-HF	82	4.6	160	2500	0.25	0.5	62.2	18	947B
CZRA5948B-HF	91	4.1	200	3000	0.25	0.5	69.2	16	948B
CZRA5949B-HF	100	3.7	250	3100	0.25	0.5	76.0	15	949B
CZRA5950B-HF	110	3.4	300	4000	0.25	0.5	83.6	13	950B
CZRA5951B-HF	120	3.1	380	4500	0.25	0.5	91.2	12	951B
CZRA5952B-HF	130	2.9	450	5000	0.25	0.5	98.8	11	952B
CZRA5953B-HF	150	2.5	600	6000	0.25	0.5	114.0	10	953B
CZRA5954B-HF	160	2.3	700	6500	0.25	0.5	121.6	9	954B
CZRA5955B-HF	180	2.1	900	7000	0.25	0.5	136.8	8	955B
CZRA5956B-HF	200	1.9	1200	8000	0.25	0.5	152.0	7	956B

Notes: 1. The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

2. The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method.

Rating and Characteristic Curves (CZRA5920B-HF Thru CZRA5956B-HF)

Fig.1 - Power Temperature Derating Curve

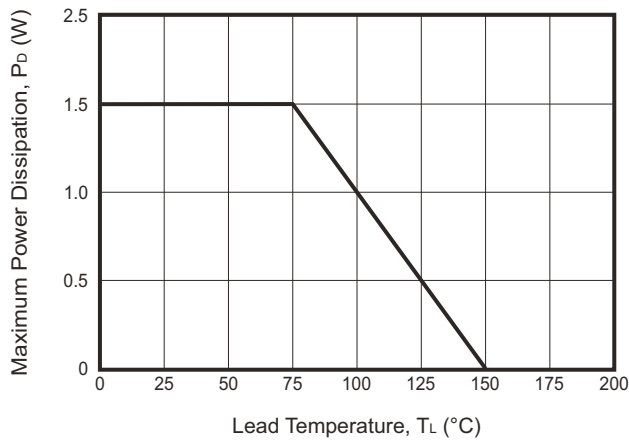


Fig.2 - Temperature Coefficients v.s. Zener Voltage

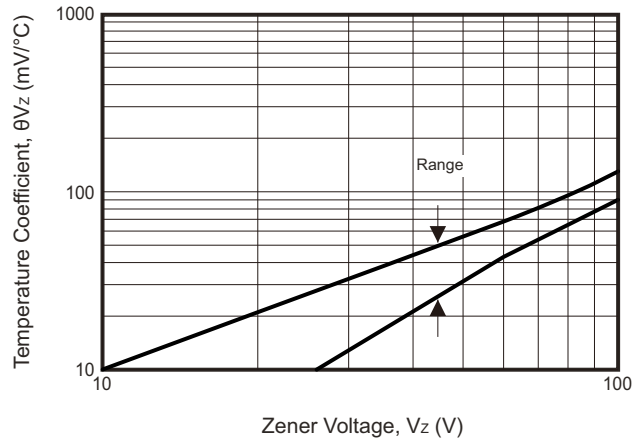


Fig.3 - Pulse Waveform

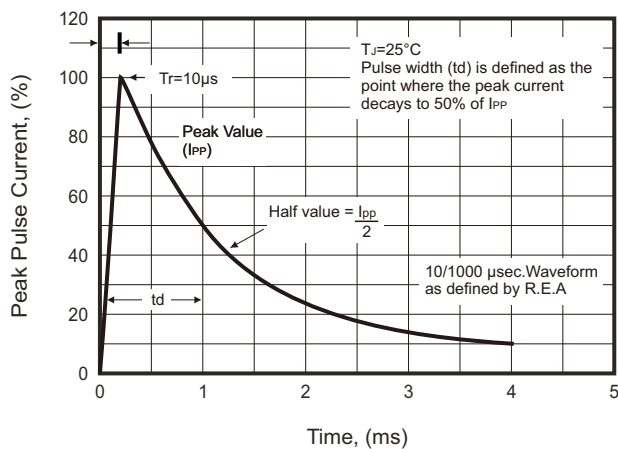
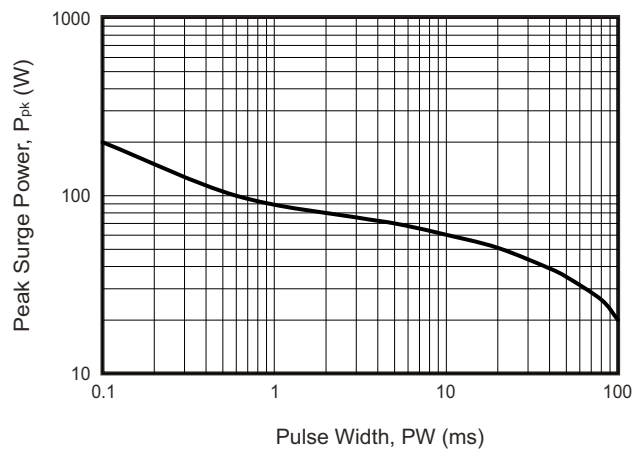
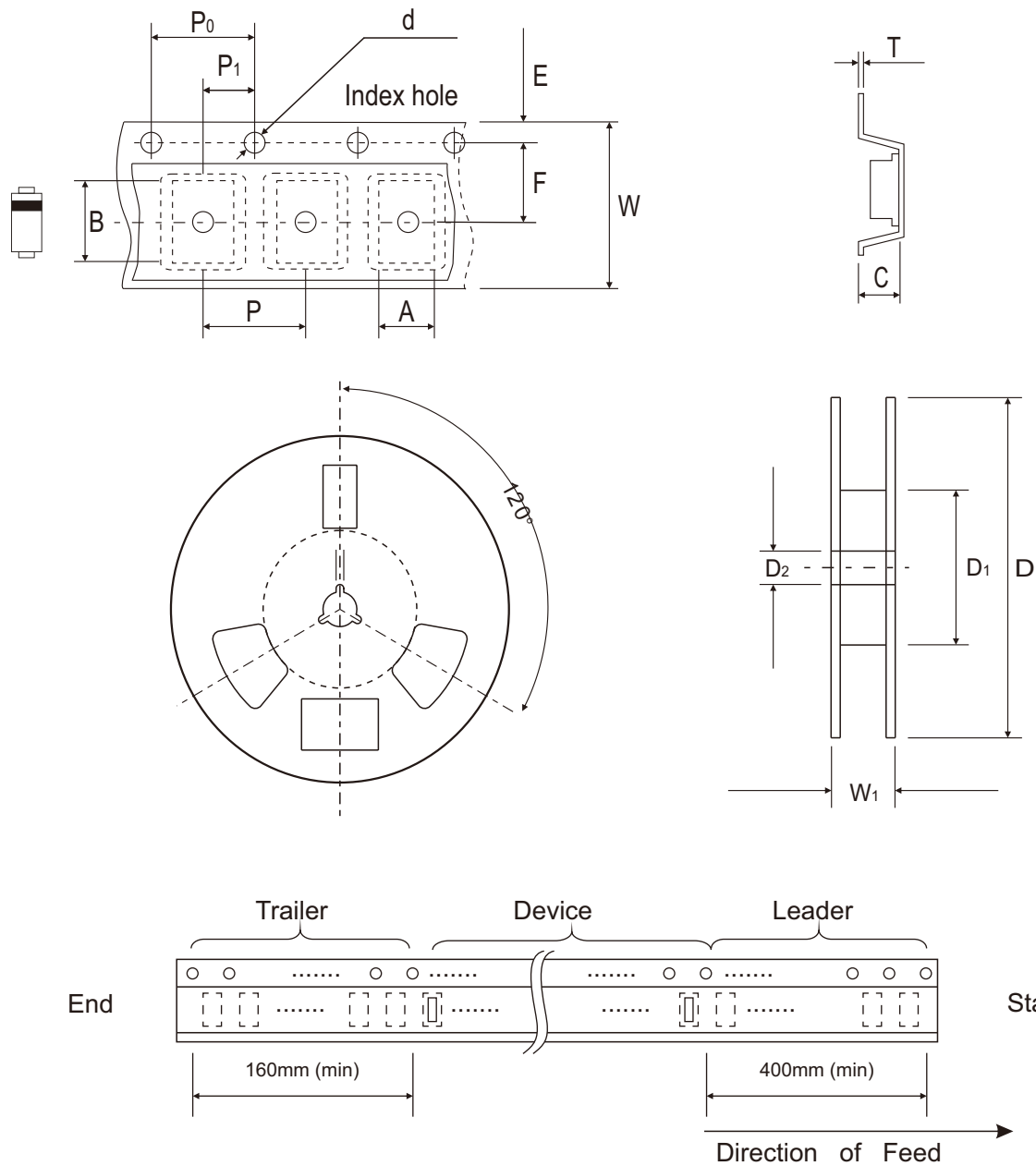


Fig.4 - Maximum Surge Power



Reel Taping Specification

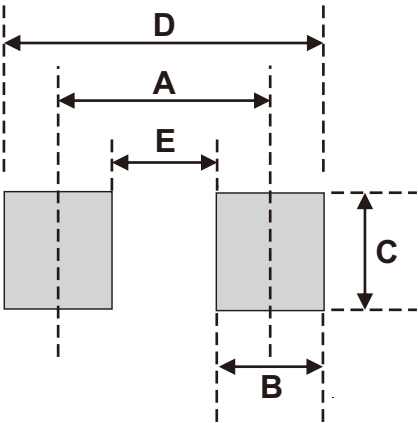


SMA (DO-214AC)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.70 (max)	5.30 (max)	2.66 (max)	1.50 ± 0.10	330	50.0 MIN.	13.5 ± 1.00
	(inch)	0.106 (max)	0.209 (max)	0.105 (max)	0.059 ± 0.004	12.99	1.969 MIN.	0.531 ± 0.039

SMA (DO-214AC)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.0 ± 0.20	18.4 (max)
	(inch)	0.689 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.008	0.724 (max)

Suggested PAD Layout

SIZE	DO-214AC(SMA)	
	(mm)	(inch)
A	3.80	0.150
B	1.60	0.063
C	2.80	0.110
D	5.40	0.213
E	2.20	0.087



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AC (SMA)	5,000	13