

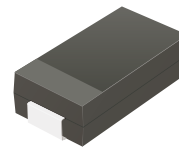
## CZRC5340B-HF Thru. CZRC5388B-HF

Voltage: 6.0 to 200 V

Power: 5 W

RoHS Device

Halogen Free

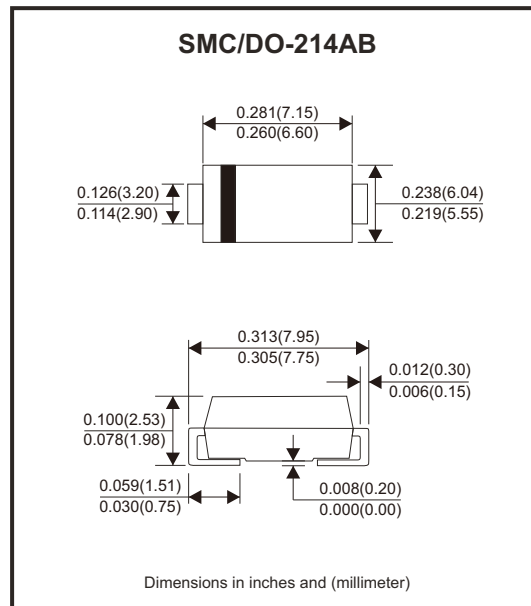


### Features

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

### Mechanical Data

- Case: SMC/DO-214AB, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Lead: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.



### Circuit Diagram



### Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
DC power dissipation at T <sub>L</sub> = 75°C	P <sub>D</sub>	5	W
Maximum forward voltage at I <sub>F</sub> = 1A	V <sub>F</sub>	1.2	V
Junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics (at TA=25°C unless otherwise specified)

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)	
CZRC5340B-HF	6.0	200	1.0	300	1	1.0	3.0	790.0	340B
CZRC5341B-HF	6.2	200	1.0	200	1	1.0	3.0	765.0	341B
CZRC5342B-HF	6.8	175	1.0	200	1	10.0	5.2	700.0	342B
CZRC5343B-HF	7.5	175	1.5	200	1	10.0	5.7	630.0	343B
CZRC5344B-HF	8.2	150	1.5	200	1	10.0	6.2	580.0	344B
CZRC5345B-HF	8.7	150	2.0	200	1	10.0	6.6	545.0	345B
CZRC5346B-HF	9.1	150	2.0	150	1	7.5	6.9	520.0	346B
CZRC5347B-HF	10.0	125	2.0	125	1	5.0	7.6	475.0	347B
CZRC5348B-HF	11.0	125	2.5	125	1	5.0	8.4	430.0	348B
CZRC5349B-HF	12.0	100	2.5	125	1	2.0	9.1	395.0	349B
CZRC5350B-HF	13.0	100	2.5	100	1	1.0	9.9	365.0	350B
CZRC5351B-HF	14.0	100	2.5	75	1	1.0	10.6	340.0	351B
CZRC5352B-HF	15.0	75	2.5	75	1	1.0	11.5	315.0	352B
CZRC5353B-HF	16.0	75	2.5	75	1	1.0	12.2	295.0	353B
CZRC5354B-HF	17.0	70	2.5	75	1	0.5	12.9	280.0	354B
CZRC5355B-HF	18.0	65	2.5	75	1	0.5	13.7	265.0	355B
CZRC5356B-HF	19.0	65	3.0	75	1	0.5	14.4	250.0	356B
CZRC5357B-HF	20.0	65	3.0	75	1	0.5	15.2	237.0	357B
CZRC5358B-HF	22.0	50	3.5	75	1	0.5	16.7	216.0	358B
CZRC5359B-HF	24.0	50	3.5	100	1	0.5	18.2	198.0	359B
CZRC5360B-HF	25.0	50	4.0	110	1	0.5	19.0	190.0	360B
CZRC5361B-HF	27.0	50	5.0	120	1	0.5	20.6	176.0	361B
CZRC5362B-HF	28.0	50	6.0	130	1	0.5	21.2	170.0	362B
CZRC5363B-HF	30.0	40	8.0	140	1	0.5	22.8	158.0	363B
CZRC5364B-HF	33.0	40	10.0	150	1	0.5	25.1	144.0	364B
CZRC5365B-HF	36.0	30	11.0	160	1	0.5	27.4	132.0	365B
CZRC5366B-HF	39.0	30	14.0	170	1	0.5	29.7	122.0	366B
CZRC5367B-HF	43.0	30	20.0	190	1	0.5	32.7	110.0	367B
CZRC5368B-HF	47.0	25	25.0	210	1	0.5	35.8	100.0	368B
CZRC5369B-HF	51.0	25	27.0	230	1	0.5	38.8	93.0	369B
CZRC5370B-HF	56.0	20	35.0	280	1	0.5	42.6	86.0	370B
CZRC5371B-HF	60.0	20	40.0	350	1	0.5	45.5	79.0	371B
CZRC5372B-HF	62.0	20	42.0	400	1	0.5	47.1	76.0	372B
CZRC5373B-HF	68.0	20	44.0	500	1	0.5	51.7	70.0	373B
CZRC5374B-HF	75.0	20	45.0	620	1	0.5	56.0	63.0	374B
CZRC5375B-HF	82.0	15	65.0	720	1	0.5	62.2	58.0	375B
CZRC5376B-HF	87.0	15	75.0	760	1	0.5	66.0	54.5	376B
CZRC5377B-HF	91.0	15	75.0	760	1	0.5	69.2	52.5	377B

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.

## Electrical Characteristics (at TA=25°C unless otherwise specified)

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)	
CZRC5378B-HF	100.0	12	90.0	800	1	0.5	76.0	47.5	378B
CZRC5379B-HF	110.0	12	125.0	1000	1	0.5	83.6	43.0	379B
CZRC5380B-HF	120.0	10	170.0	1150	1	0.5	91.2	39.5	380B
CZRC5381B-HF	130.0	10	190.0	1250	1	0.5	98.8	36.6	381B
CZRC5382B-HF	140.0	8	230.0	1500	1	0.5	106.0	34.0	382B
CZRC5383B-HF	150.0	8	330.0	1500	1	0.5	114.0	31.6	383B
CZRC5384B-HF	160.0	8	350.0	1650	1	0.5	122.0	29.4	384B
CZRC5385B-HF	170.0	8	380.0	1750	1	0.5	129.0	28.0	385B
CZRC5386B-HF	180.0	5	430.0	1750	1	0.5	137.0	26.4	386B
CZRC5387B-HF	190.0	5	450.0	1850	1	0.5	144.0	25.0	387B
CZRC5388B-HF	200.0	5	480.0	1850	1	0.5	152.0	23.6	388B

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 (CZRC5340B-HT Thru. CZRC5388B-HF)

Fig.1 - Power Temperature Derating Curve

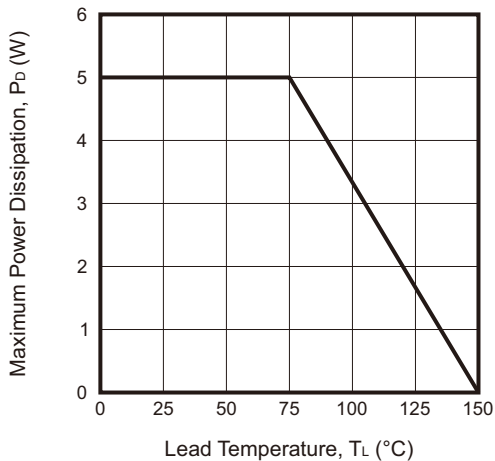


Fig.2 - Temperature Coefficients vs. Zener Voltage

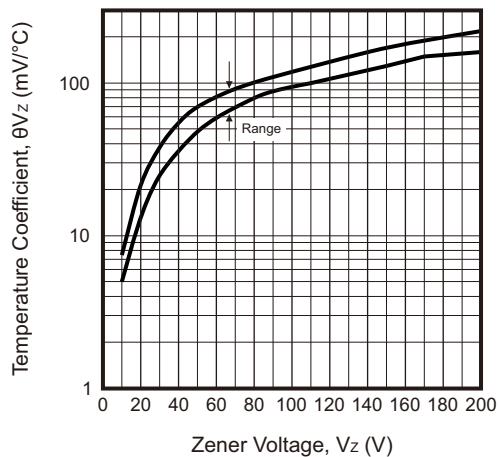


Fig.3 - Pulse Waveform

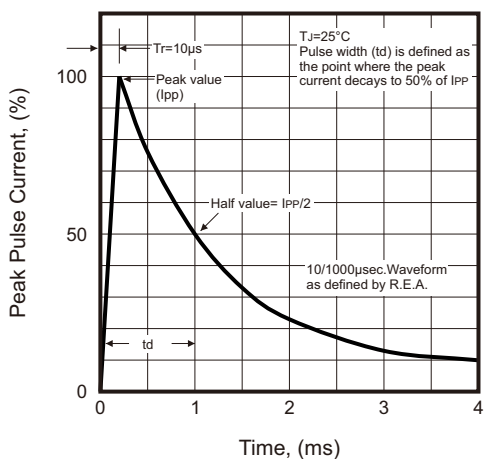
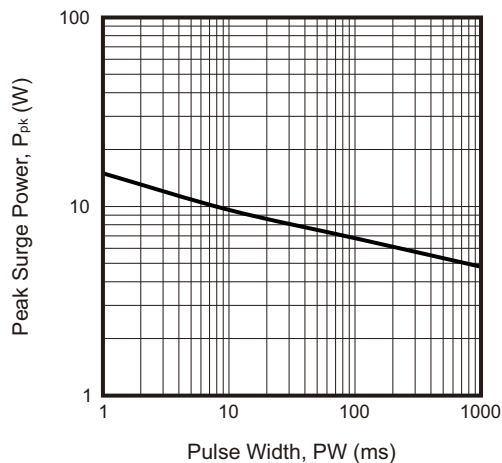
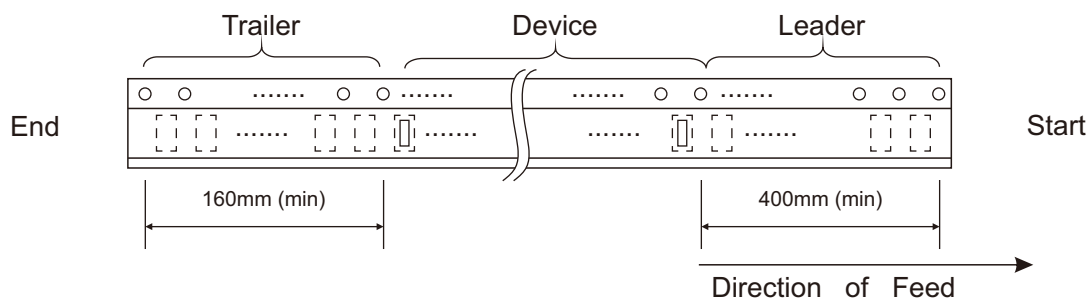
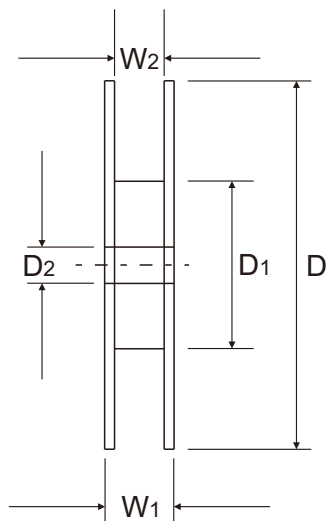
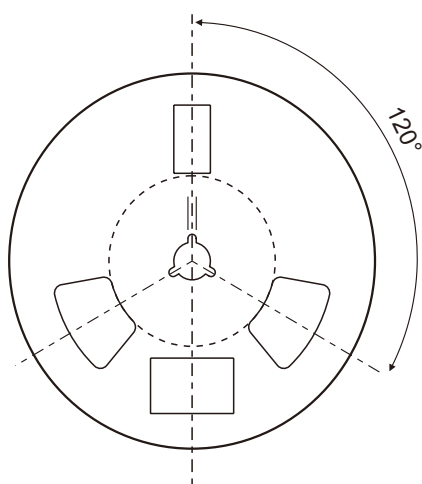
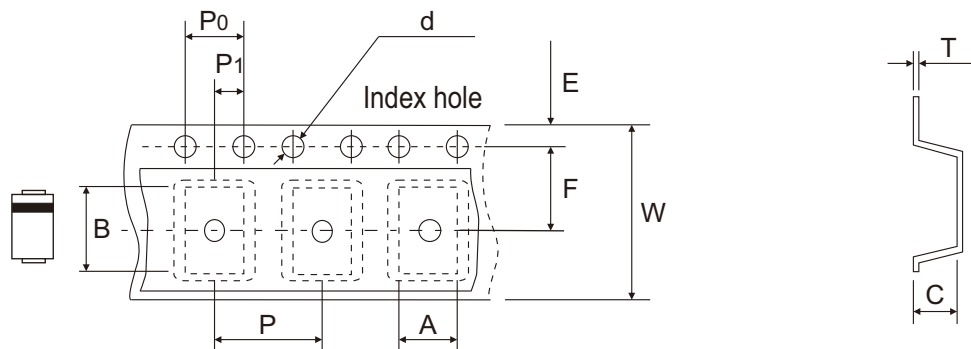


Fig.4 - Maximum Surge Power



## Reel Taping Specification



DO-214AB (SMC)	SYMBOL	A	B	C	d	D	D1	D2	E	
	(mm)	See Note 1				1.55 ± 0.05	330.00	50.00 (Min.)	13.00 ± 0.50	1.75 ± 0.05
	(inch)	See Note 1				0.061 ± 0.002	12.992	1.969 (Min.)	0.512 ± 0.020	0.069 ± 0.002

DO-214AB (SMC)	SYMBOL	F	P	P0	P1	T	W	W1	W2
	(mm)	7.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.40 (Max.)	16.00 ± 0.10	22.40 (Max.)	18.40 (Max.)
	(inch)	0.295 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.016 (Max.)	0.630 ± 0.004	0.882 (Max.)	0.724 (Max.)

Notes: 1. A, B, and C the clearance between the component and the cavity must be within 0.5mm max. for 8mm tape and 12mm tape, 1.0mm max. for 16mm tape and 24mm tape.

## Marking Code

Part Number	Marking Code
CZRC5340B-HF Thru. CZRC5388B-HF	See Page.2~3

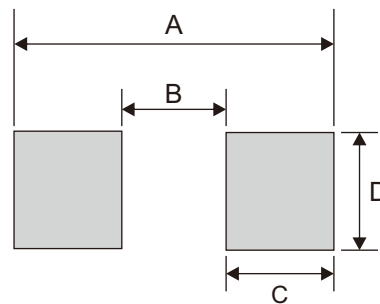


xxxx = Marking code (See Page.2~3)

█ = Cathode band

## Suggested P.C.B. PAD Layout

SIZE	DO-214AB(SMC)	
	(mm)	(inch)
A	8.13 Ref	0.320 Ref
B	4.69 Max	0.185 Max
C	1.52 Min	0.060 Min
D	3.20 Min	0.126 Min



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-214AB (SMC)	3,000	13