

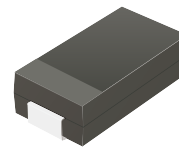
CZRC5340B-HF Thru. CZRC5388B-HF

Voltage: 6.0 to 200 V

Power: 5 W

RoHS Device

Halogen Free

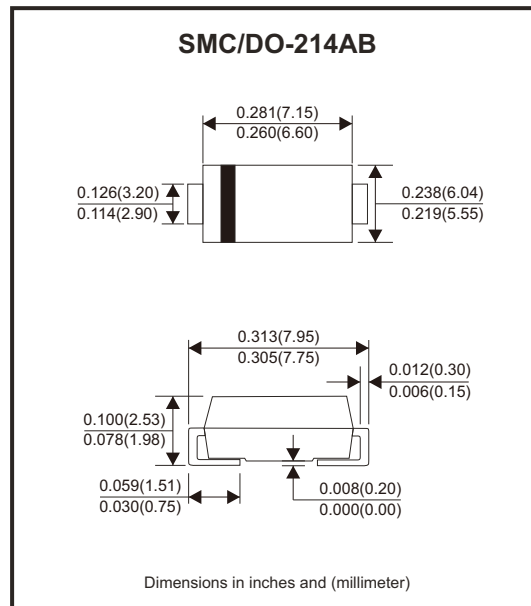


Features

- 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 _L = 75°C	P _D	5	W
Maximum forward voltage at I _F = 1A	V _F	1.2	V
Junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-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

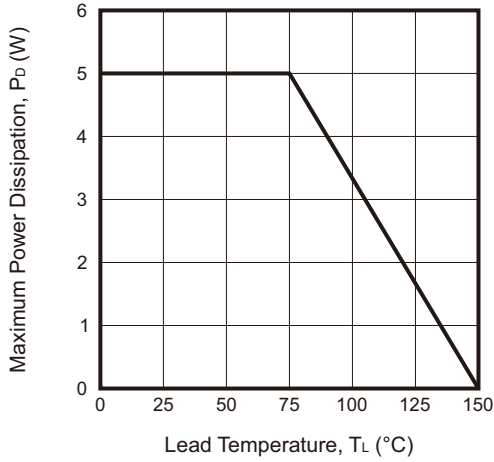


Fig.2 - Temperature Coefficients vs. Zener Voltage

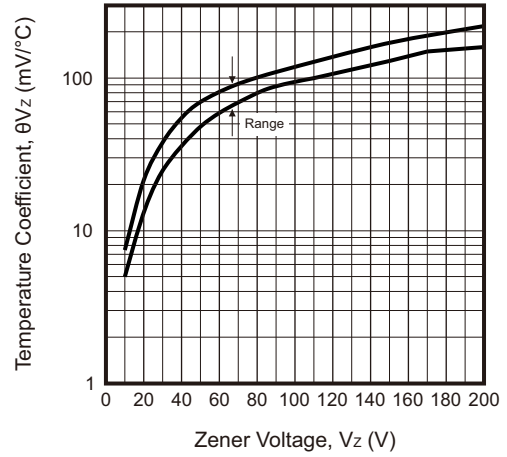


Fig.3 - Pulse Waveform

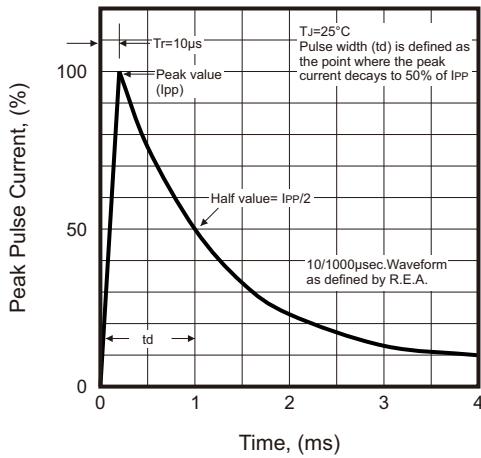
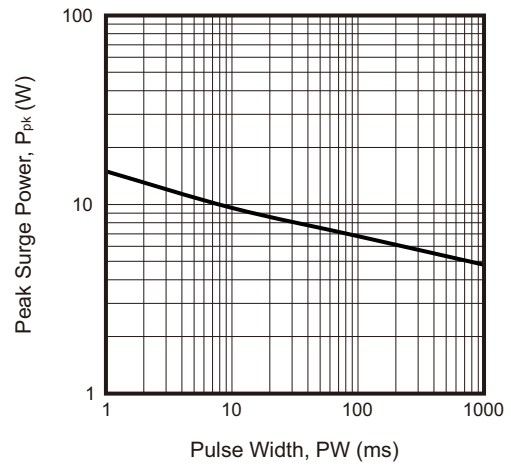
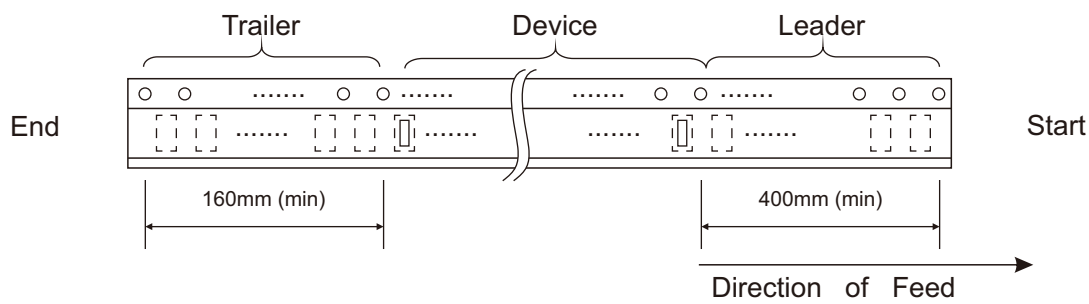
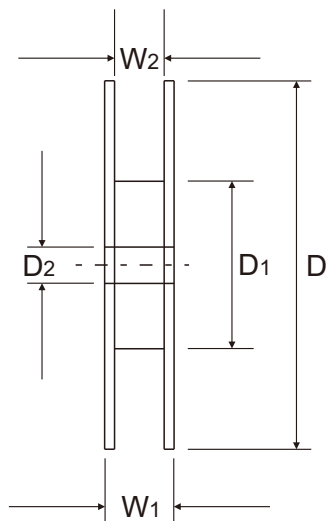
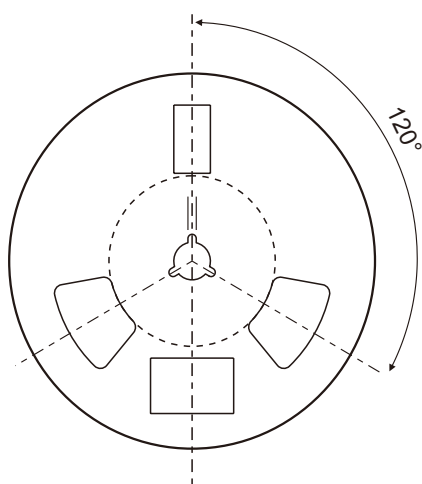
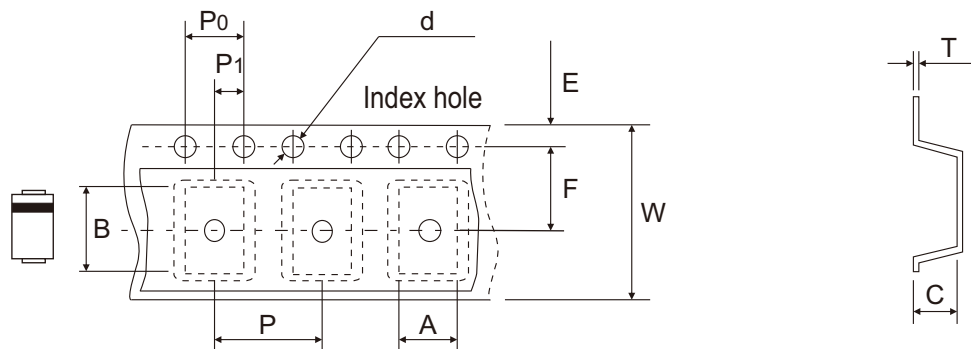


Fig.4 - Maximum Surge Power



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

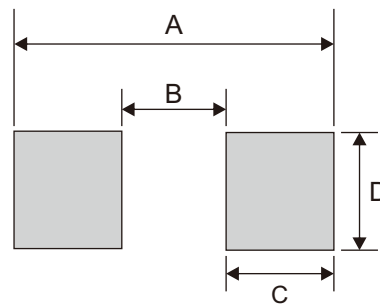


xxxx = Marking code (See Page.2~3)

█ = 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