

CZRB5338B-HF Thru. CZRB5388B-HF

Voltage: 5.1V to 200V

Power: 5 W
RoHS Device
Halogen Free

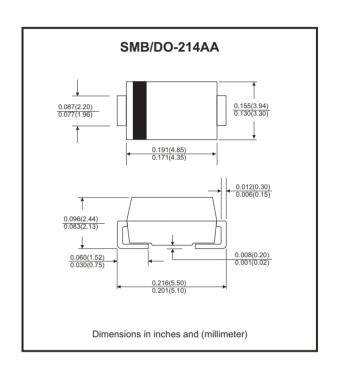


Features

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

Mechanical data

- Epoxy: UL 94V-0 rate flame retardant
- Case: Molded plastic
- Lead: Solderable per MIL-STD-202, method 208 guranteed.
- Polarity: Color band denotes cathode end.
- Mounting position: Any



Circuit diagram



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

Parameter	Symbol	Value	Unit
DC Power dissipation at T _L = 50°C (Note 1)	Po	5.0	W
Maximum forward voltage at IF = 200 mA	VF	1.2	V
Junction temperature range	Τı	-55 to +150	°C
Storange temperature range	Тѕтс	-55 to +150	°C

Note:

(1) T_L = Lead temperature at 3/8" (9.5mm) from body.



Rating and Characteristics Curves (CZRB5338B-HF Thru CZRB5388B-HF)

Fig.1 - Power Temperature Derating Curve

5.0

4.0

4.0

2.0

0.0

25 50 75 100 125 150 175

Lead Temperature, TL (°C)

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

100
Range

Zener Voltage

Zener Voltage

Zener Voltage, Vz (V)

V.s. Lead Length

Wesistance (%CW)

10

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

Lead Length to Heatsink, L (inches)

Fig.3 - Typical Thermal Resistance

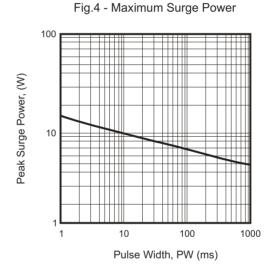
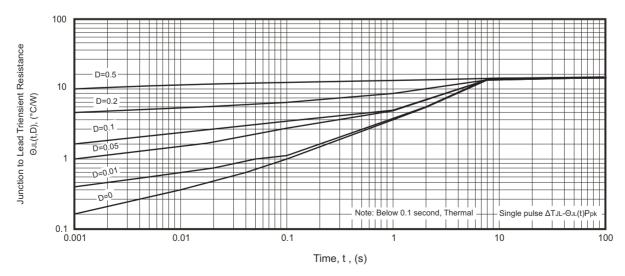


Fig.5 - Typical Thermal Response L, Lead Length=3/8inch





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

Part Number	Nominal Zener Voltage		Zener Voltage Zener Impedance				ce	Maximum Reverse Leakage Current		Marking
Fait Nullibei	Vz @ Izт	lzт	Zzt @ Izt	Zzk @ Izk	lzĸ	Ir @ Vr		Code		
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μΑ)	(V)			
CZRB5338B-HF	5.1	240	1.5	400	1	1.0	1.0	338B		
CZRB5339B-HF	5.6	220	1.0	400	1	1.0	2.0	339B		
CZRB5340B-HF	6.0	200	1.0	300	1	1.0	3.0	340B		
CZRB5341B-HF	6.2	200	1.0	200	1	1.0	3.0	341B		
CZRB5342B-HF	6.8	175	1.0	200	1	10.0	5.2	342B		
CZRB5343B-HF	7.5	175	1.5	200	1	10.0	5.7	343B		
CZRB5344B-HF	8.2	150	1.5	200	1	10.0	6.2	344B		
CZRB5345B-HF	8.7	150	2.0	200	1	10.0	6.6	345B		
CZRB5346B-HF	9.1	150	2.0	150	1	7.5	6.9	346B		
CZRB5347B-HF	10.0	125	2.0	125	1	5.0	7.6	347B		
CZRB5348B-HF	11.0	125	2.5	125	1	5.0	8.4	348B		
CZRB5349B-HF	12.0	100	2.5	125	1	2.0	9.1	349B		
CZRB5350B-HF	13.0	100	2.5	100	1	1.0	9.9	350B		
CZRB5351B-HF	14.0	100	2.5	75	1	1.0	10.6	351B		
CZRB5352B-HF	15.0	75	2.5	75	1	1.0	11.5	352B		
CZRB5353B-HF	16.0	75	2.5	75	1	1.0	12.2	353B		
CZRB5354B-HF	17.0	70	2.5	75	1	0.5	12.9	354B		
CZRB5355B-HF	18.0	65	2.5	75	1	0.5	13.7	355B		
CZRB5356B-HF	19.0	65	3.0	75	1	0.5	14.4	356B		
CZRB5357B-HF	20.0	65	3.0	75	1	0.5	15.2	357B		
CZRB5358B-HF	22.0	50	3.5	75	1	0.5	16.7	358B		
CZRB5359B-HF	24.0	50	3.5	100	1	0.5	18.2	359B		
CZRB5360B-HF	25.0	50	4.0	110	1	0.5	19.0	360B		
CZRB5361B-HF	27.0	50	5.0	120	1	0.5	20.6	361B		
CZRB5362B-HF	28.0	50	6.0	130	1	0.5	21.2	362B		
CZRB5363B-HF	30.0	40	8.0	140	1	0.5	22.8	363B		

Notes

⁽¹⁾ The type number listed have a standard tolerance on th 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 (TA=25°C unless otherwise noted)

Part Number	Nominal Zener Voltage		Z	Maximum ener Impedand	ce	Maximum Reverse Leakage Current		Marking
T dit Number	Vz @ Izt	lzт	Zzt @ Izt	Zzk @ Izk	lzĸ	IR @ VR		Code
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μΑ)	(V)	
CZRB5364B-HF	33.0	40	10.0	150	1	0.5	25.1	364B
CZRB5365B-HF	36.0	30	11.0	160	1	0.5	27.4	365B
CZRB5366B-HF	39.0	30	14.0	170	1	0.5	29.7	366B
CZRB5367B-HF	43	30	20	190	1	0.5	32.7	367B
CZRB5368B-HF	47	25	25	210	1	0.5	35.8	368B
CZRB5369B-HF	51	25	27	230	1	0.5	38.8	369B
CZRB5370B-HF	56	20	35	280	1	0.5	42.6	370B
CZRB5371B-HF	60	20	40	350	1	0.5	42.5	371B
CZRB5372B-HF	62	20	42	400	1	0.5	47.1	372B
CZRB5373B-HF	68	20	44	500	1	0.5	51.7	373B
CZRB5374B-HF	75	20	45	620	1	0.5	56.0	374B
CZRB5375B-HF	82	15	65	720	1	0.5	62.2	375B
CZRB5376B-HF	87	15	75	760	1	0.5	66.0	376B
CZRB5377B-HF	91	15	75	760	1	0.5	69.2	377B
CZRB5378B-HF	100	12	90	800	1	0.5	76.0	378B
CZRB5379B-HF	110	12	125	1000	1	0.5	83.6	379B
CZRB5380B-HF	120	10	170	1150	1	0.5	91.2	380B
CZRB5381B-HF	130	10	190	1250	1	0.5	98.8	381B
CZRB5382B-HF	140	8	230	1500	1	0.5	106.0	382B
CZRB5383B-HF	150	8	330	1500	1	0.5	114.0	383B
CZRB5384B-HF	160	8	350	1650	1	0.5	122.0	384B
CZRB5385B-HF	170	8	380	1750	1	0.5	129.0	385B
CZRB5386B-HF	180	5	430	1750	1	0.5	137.0	386B
CZRB5387B-HF	190	5	450	1850	1	0.5	144.0	387B
CZRB5388B-HF	200	5	480	1850	1	0.5	152.0	388B

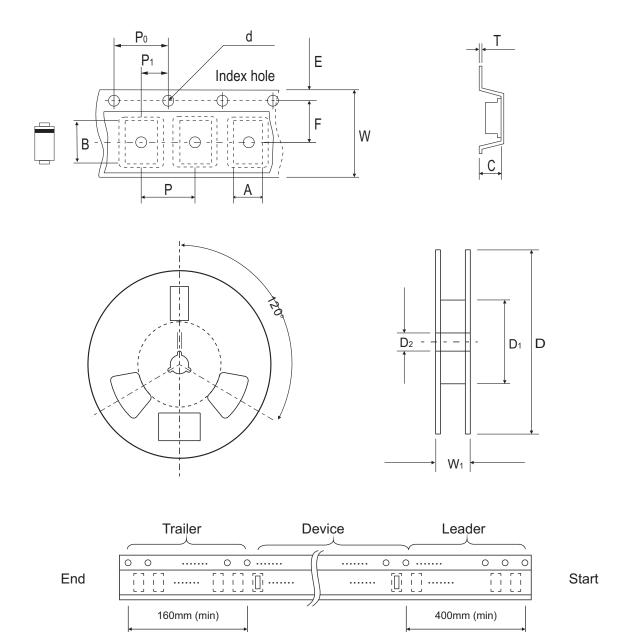
Notes:

⁽¹⁾ The type number listed have a standard tolerance on th 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.



Reel Taping Specification



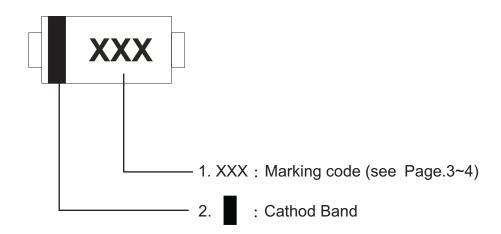
DO-214AA	SYMBOL	Α	В	С	d	D	D1	D2
(SMB)	(mm)	3.67 ± 0.10	5.69 ± 0.10	2.67 ± 0.10	1.55 ± 0.10	330.00 ± 2.00	50.00 MIN.	13.00 ± 0.20
(01112)	(inch)	0.144 ± 0.004	0.224 ± 0.004	0.105 ± 0.004	0.061 ± 0.004	12.99 ± 0.079	1.969 MIN.	0.512 ± 0.008

DO-214AA	SYMBOL	E	F	Р	P0	P 1	t	W	W 1
(SMB)	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.40 (MAX)	12.00 ± 0.30	18.40 (MAX)
(GIIIS)	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.016 (MAX)	0.472 ± 0.012	0.724 (MAX)

Direction of Feed

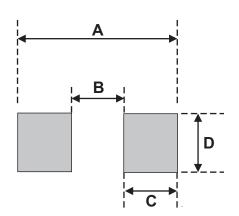


Marking Code



Suggested PAD Layout

SIZE	DO-214AA(SMB)				
OIZE	(mm)	(inch)			
Α	5.60	0.220			
В	2.16 MAX	0.085 MAX			
С	1.52 MIN	0.060 MIN			
D	2.18 MIN	0.086 MIN			



Standard Packaging

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Comchip Technology:

CZRB5378B-HF CZRB5348B-HF CZRB5379B-HF CZRB5339B-HF CZRB5350B-HF CZRB5351B-HF

CZRB5364B-HF CZRB5370B-HF CZRB5377B-HF CZRB5380B-HF CZRB5349B-HF CZRB5368B-HF CZRB5385B-HF CZRB5374B-HF CZRB5388B-HF CZRB5353B-HF CZRB5355B-HF CZRB5340B-HF CZRB5341B-HF

CZRB5352B-HF CZRB5367B-HF CZRB5366B-HF CZRB5366B-HF CZRB5386B-HF CZRB5358B-HF CZRB5376B-HF CZRB5383B-HF CZRB5384B-HF CZRB5360B-HF CZRB5369B-HF CZRB5357B-HF CZRB5361B-HF CZRB5375B-HF

CZRB5363B-HF CZRB5338B-HF CZRB5373B-HF CZRB5344B-HF CZRB5382B-HF CZRB5356B-HF CZRB5359B-HF CZRB5354B-HF CZRB5347B-HF CZRB5347B-HF CZRB5345B-HF CZRB5365B-HF CZRB5346B-HF

CZRB5345B-HF CZRB5371B-HF CZRB5342B-HF CZRB5342B-HF CZRB5387B-HF

CZRB5345B-HF CZRB5371B-HF CZRB5342B-HF CZRB5343B-HF CZRB5372B-HF CZRB5387B-HF