SAMSUNG ELECTRO-MECHANICS

Chip Bead *For High Current*

CIC Series- CIC31 (3216 EIA 1206)

The CIC Series can be used in high current owing to their low DC resistance.
They can match power lines to maximum of 3A DC

FEATURES

- Smallest beads used in high current.
  (CIC: ~ 3A)

APPLICATION

- Suppression of noise in power line

SPECIFICATION

- Operating temperature range –55 to +125°C
- Storage temperature range –10 to +40°C
- Relative humidity 30 to 70%

PRODUCT IDENTIFICATION

CI	C	31	P	300	N	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Chip Beads
(2) For High current(~3A)
(3) Dimension
(4) Material Code
P: Broad impedance, especially suppresses noise in the 10~200MHz range
J: Suppresses noise in the 100~300MHz range
(5) Nominal impedance (300:30Ω, 221:220Ω)
(6) Thickness option(N:Standard, A:Thinner than standard, B:Thicker than standard)
(7) Packaging(C:paper tape, E:embossed tape)

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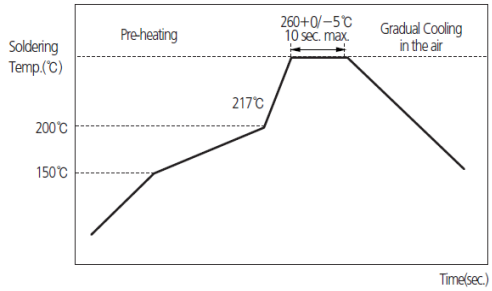
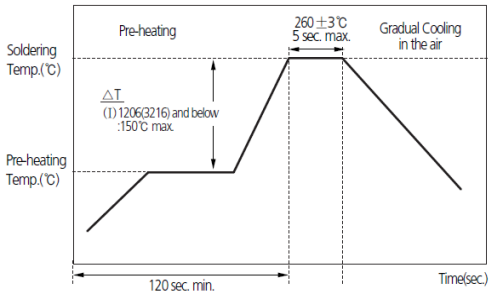
RECOMMENDED SOLDERING CONDITION

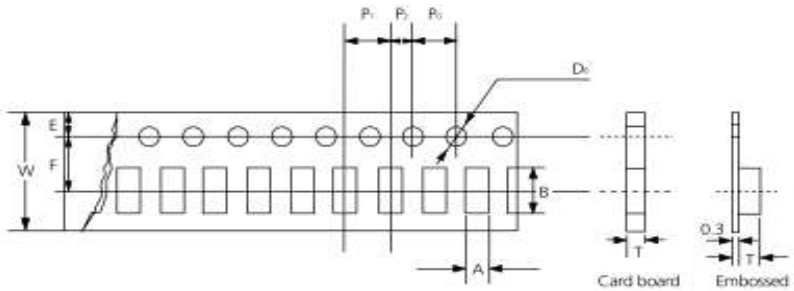
REFLOW SOLDERING



FLOW SOLDERING



PACKAGING

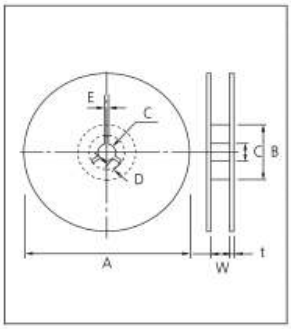


Unit: mm

Type		03	05	10	21				22	31				32	41	43
Tape		Card	Card	Card	Embossed			Card	Embossed	Embossed			Card	Embossed	Embossed	Embossed
Chip Thickness		0.3	0.5	0.8	0.85	1.0	1.25	0.85	1.2	0.6	0.8	1.1	0.85	1.3	1.6 (1.2)	1.5
Chip Cavity	A	0.40 ±0.06	0.65 ±0.1	1.0 ±0.2	1.5 ±0.2	1.5 ±0.2	1.5 ±0.2	1.45 ±0.1	2.39 ±0.10	1.9 ±0.2	1.9 ±0.2	1.9 ±0.2	2.0 ±0.2	2.9 ±0.2	1.9 ±0.2	3.5 ±0.2
	B	0.70 ±0.06	1.15 ±0.1	1.8 ±0.2	2.3 ±0.2	2.3 ±0.2	2.3 ±0.2	2.4 ±0.2	2.79 ±0.10	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	4.9 ±0.2	4.9 ±0.2
T max		0.45	0.8	1.1	1.5	2.0	2.0	0.95 ±0.1	1.80 ±0.10	1.15	1.4	1.4	1.1	1.55	1.8	1.78
W		8 ±0.2	8 ±0.2	8 ±0.2	8 ±0.2	8 ±0.2	8 ±0.2	8.0 ±0.3	8.0 ±0.3	8 ±0.2	8 ±0.2	8 ±0.2	8 ±0.2	8 ±0.2	12 ±0.2	12 ±0.2
F		3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	5.5 ±0.05	5.5 ±0.05
E		1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1
P_1		2 ±0.05	2 ±0.05	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	8.0 ±0.1	8.0 ±0.1
P_2		2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2.0 ±0.1	2.0 ±0.05	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1	2 ±0.1
P_0		4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1
D_0		Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 +0.1 /-0	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 +0.1 /-0	Φ1.5 ±0.1	Φ1.5 ±0.1	Φ1.5 ±0.1
Quantity / Reel (PCS)		10,000 (15,000)	10,000	4,000	4,000	3,000	2,000	4,000	2,000	4,000	3,000	3,000	4,000	2,500	2,000 (3,000)	1,000

• Reel dimensions

Unit: mm



Symbol	Tape Width	A	B	C	D
7" Reel	8mm	Ø180+0/-3	Ø60+1/-0	Ø13±0.3	4±0.2
	12mm	Ø180+0/-3	Ø60+1/-0	Ø13±0.3	4±0.2
10" Reel	8mm	Ø258+0/-3	Ø80+1/-0	Ø13±0.3	4±0.2
	12mm	Ø258+0/-3	Ø80+1/-0	Ø13±0.3	4±0.2
13" Reel	8mm	Ø330±2.0	Ø80±1.0	Ø13±0.3	4±0.2
	12mm	Ø330±2.0	Ø80±1.0	Ø13±0.3	4±0.2

Symbol	Tape Width	E	W	t
7" Reel	8mm	2.0±0.5	9±0.5	1.2±0.2
	12mm	2.0±0.5	13±0.5	1.2±0.2
10" Reel	8mm	2.0±0.5	9±0.5	1.8±0.2
	12mm	2.0±0.5	13±0.5	1.8±0.2
13" Reel	8mm	2.0±0.5	9±0.5	2.2±0.2
	12mm	2.0±0.5	13±0.5	2.2±0.2

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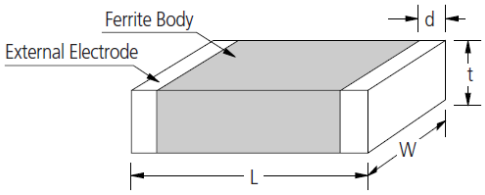
1. Model : CIC3216 Type

2. Dimension

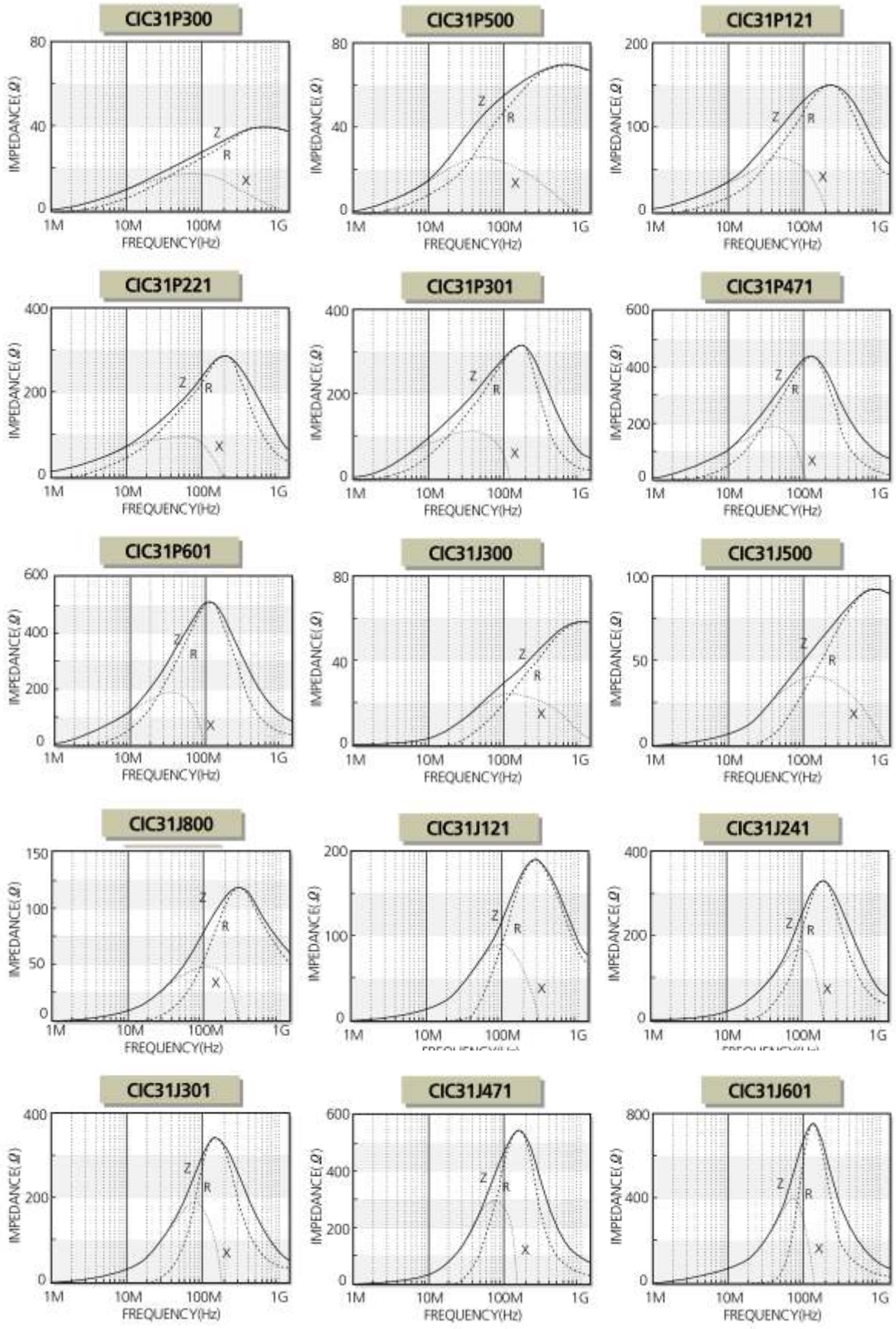


Type	Dimension [mm]			
	L	W	t	d
31	3.2±0.2	1.6±0.2	1.1±0.2	0.5+0.2 -0.3

3. Description

Part no.	Thickness (mm)	Impedance (Ω)±25%@100MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC31P300	1.1±0.2	30	0.01	6000
CIC31P500	1.1±0.2	50	0.025	3000
CIC31P700	1.1±0.2	70	0.025	3000
CIC31P121	1.1±0.2	120	0.025	2000
CIC31P221	1.1±0.2	220	0.05	2000
CIC31P301	1.1±0.2	300	0.05	2000
CIC31P471	1.1±0.2	470	0.07	1500
CIC31P601	1.1±0.2	600	0.15	1000
CIC31J300	1.1±0.2	30	0.02	4000
CIC31J500	1.1±0.2	50	0.02	4000
CIC31J800	1.1±0.2	80	0.02	4000
CIC31J121	1.1±0.2	120	0.03	4000
CIC31J241	1.1±0.2	240	0.05	3000
CIC31J301	1.1±0.2	300	0.05	3000
CIC31J471	1.1±0.2	470	0.05	3000
CIC31J601	1.1±0.2	600	0.05	2500

4. Characteristics data



■ NOTICE :All specifications are subject to change without previous notice. Please contact with product representatives or engineers to check specifications.