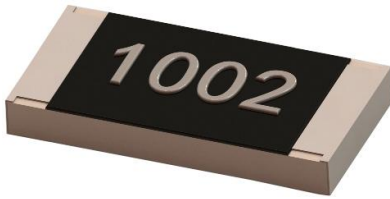


# Fully Lead-free Thick Film Chip Resistor – BCTF Series



## Features

- RoHS, Halogen Free and REACH Compliance
- High component and equipment reliability
- PCB space saving
- None forbidden-materials used in products/production

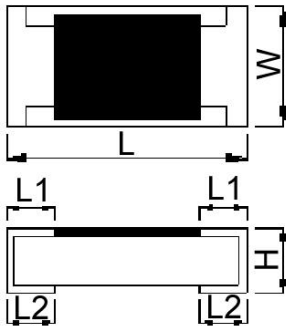
## Applications

- All general purpose application

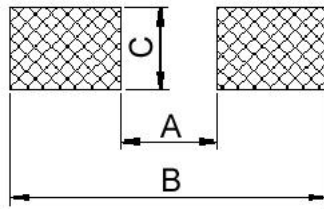
## Product Identification

B	CTF	00	0805	-	10R2	F	TP
Grade	Product Series	Control Code	Dimensions Code	Special Code	Nominal Resistance	Tolerance	Taping Code
	Fully Lead-Free		1005		10R2=10.2Ω	B=±0.1%	H1 (20000Pcs) : 1005
	Thick Film		0201		1002=10KΩ	D=±0.5%	TH (10000Pcs) : 0201~0402
	Chip Resistors		0402			F=±1%	TP (5000Pcs) : 0603~1210
			0603			J=±5%	TE (4000Pcs) : 2010~2512
			0805				
			1206				
			2010				
			2512				

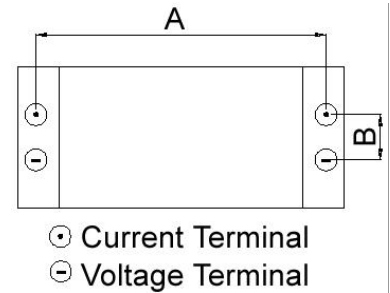
## Configuration and Dimensions



## Recommended Pattern



## Measurement Point



Dimensions in mm

Type	Configuration and Dimensions					Recommended Pattern			Measurement Point	
	L	W	H	L1	L2	A	B	C	A	B
BCTF001005	0.40±0.02	0.20±0.02	0.13±0.02	0.10±0.03	0.10±0.03	0.2	0.5	0.2	-	-
BCTF000201	0.60±0.03	0.30±0.03	0.23±0.03	0.10±0.05	0.15±0.05	0.3	1	0.4	0.44±0.05	0.22±0.05
BCTF000402	1.00±0.10	0.50±0.05	0.30±0.05	0.20±0.10	0.25±0.10	0.5	1.5	0.6	0.80±0.05	0.24±0.05
BCTF000603	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.15	0.30±0.15	0.8	2.1	0.9	1.35±0.05	0.35±0.05
BCTF000805	2.00±0.10	1.25±0.10	0.50±0.10	0.35±0.20	0.35±0.15	1.2	3	1.3	1.80±0.05	0.35±0.05
BCTF001206	3.05±0.10	1.55±0.10	0.50±0.10	0.45±0.20	0.35±0.15	2.2	4.2	1.6	2.90±0.05	0.35±0.05
BCTF002010	5.00±0.20	2.50±0.20	0.55±0.10	0.60±0.20	0.60±0.20	3.5	6.1	2.8	4.50±0.05	1.15±0.05
BCTF002512	6.30±0.20	3.20±0.20	0.55±0.10	0.60±0.20	0.60±0.20	3.8	8	3.5	5.90±0.05	1.60±0.05

# Fully Lead-free Thick Film Chip Resistor – BCTF Series

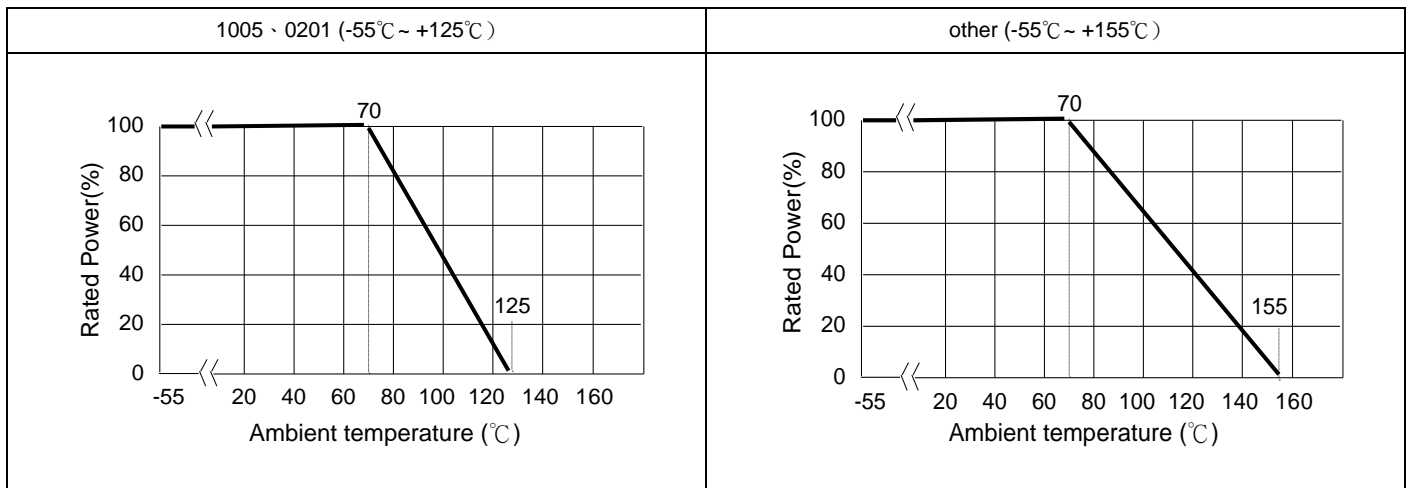
## Electrical Characteristics Resistance Range: $\geq 1\Omega$ & $0\Omega$

Type	Rated Power at 70°C (W)	Working Voltage (V) Max.	Overload Voltage (V) Max.	T.C.R (ppm/°C)	Resistance Range ( $\Omega$ )			JUMPER Rated Current (A)		JUMPER Resistance Value (m $\Omega$ ) Max	
					$\pm 0.1\%$	$\pm 0.5\%$	$\pm 1\%, \pm 5\%$	$\pm 5\%$	$\pm 1\%$	$\pm 5\%$	$\pm 1\%$
					E-24、E-96	E-24、E-96	E-24、E-96				
BCTF001005	1/32	15	30	-200+600	-	-	$1 \leq R < 10$	0.5	0.5	50	50
				$\pm 250$	-	-	$10 \leq R \leq 1M$				
BCTF000201	1/20	25	50	$\pm 250$	$100 \leq R \leq 1M$	$15 \leq R \leq 1M$	$15 \leq R \leq 1M$	0.5	0.5	50	35
				$\pm 350$	-	-	$1M \leq R \leq 10M$				
BCTF000402	1/16	50	100	$\pm 200$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	1	1.5	50	20
				$\pm 300$	-	-	$2.2M \leq R \leq 10M$				
BCTF000603	1/10	75	150	$\pm 150$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	1	2	50	20
				$\pm 250$	-	-	$2.2M \leq R \leq 10M$				
BCTF000805	1/8	150	300	$\pm 150$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	2	2.5	50	20
				$\pm 250$	-	-	$2.2M \leq R \leq 10M$				
BCTF001206	1/4	200	400	$\pm 150$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	2	3.5	50	20
				$\pm 250$	-	-	$2.2M \leq R \leq 10M$				
BCTF002010	3/4	200	400	$\pm 150$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	2	5	50	20
				$\pm 250$	-	-	$2.2M \leq R \leq 10M$				
BCTF002512	1	200	400	$\pm 150$	$100 \leq R \leq 1M$	$1 \leq R \leq 2.2M$	$1 \leq R \leq 2.2M$	2	7	50	20
				$\pm 250$	-	-	$2.2M \leq R \leq 10M$				
Operating Temperature Range				-55°C ~ +155°C (1005、0201: -55°C ~ +125°C)							

**Note: When ordering, please specify tolerance code. Tolerance: B= $\pm 0.1\%$ , D= $\pm 0.5\%$ , F= $\pm 1\%$ , J= $\pm 5\%$ ,**

● Power Derating Curve: Operating Temperature Range: -55°C ~ +155°C

For resistors operated in ambient temperatures 70°C, power rating shall be derated in accordance with the curve below:



● Rating Current: The resistor shall have a DC continuous working current or a rms. AC continuous working current at commercial-line frequency and wave form corresponding to the power rating, as determined from the following:

Remark: E: Rated voltage.(V) , P: Rating Power.(W) , R: Nominal Resistance.( $\Omega$ )

$$E = \sqrt{R \times P}$$

## Legal disclaimer

CHILISIN, its distributors and agents (collectively, "CHILISIN"), hereby disclaims any and all liabilities for any errors, inaccuracies or incompleteness contained in any product related information, including but not limited to product specifications, datasheets, pictures and/or graphics. CHILISIN may make changes, modifications and/or improvements to product related information at any time and without notice.

CHILISIN makes no representation, warranty, and/or guarantee about the fitness of its products for any particular purpose or the continuing production of any of its products. To the maximum extent permitted by law, CHILISIN disclaims (i) any and all liability arising out of the application or use of any CHILISIN product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for a particular purpose, non-infringement and merchantability.

CHILISIN defined this product is for general electrical use , not design for any application for automotive electrical ,life-saving or life support equipment, or any application which may inflict casualties if CHILISIN product failure occurred. When consumer is using or selling products of CHILISIN without having discussion with the sales representatives and specifically stated the applicability mentioned above in a written form, then the client need to take a full responsibility and agree to protect CHILISIN from punishment and damage.

Information provided here is intended to indicate product specifications only. CHILISIN reserves all the rights for revising this content without further notification, as long as products are unchanged. Any product change will be announced by ECN.