

Thick Film Current Sensing Chip Resistor – BCCT Series



Features

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

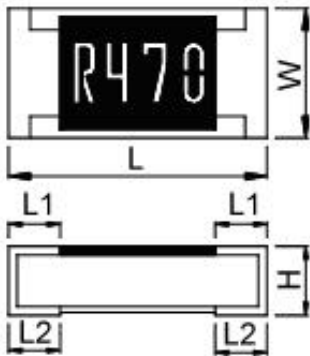
Applications

- All general purpose application

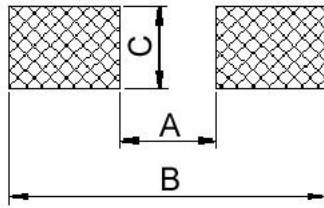
Product Identification

B	CCT	00	0805	-	R100	F	TP
Grade	Product Series	Control Code	Dimensions Code	Special Code	Nominal Resistance	Tolerance	Taping Code
	Low-Resistance		0201		R100=0.1Ω	F=±1%	TH (10000Pcs) : 0201~0402
	Thick film		0402		R20X=0.2Ω	J=±5%	TP (5000Pcs) : 0603~1210
	Chip Resistors		0603				TE (4000Pcs) : 1812~2512
			0805				
			1206				
			1210				
			1812				
			2010				
			2512				

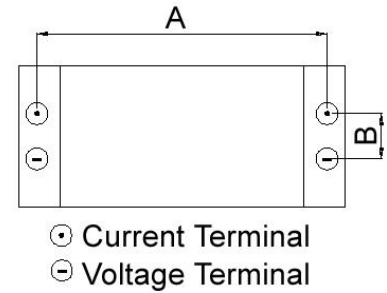
Configuration and Dimensions



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
BCCT000201	0.60±0.03	0.30±0.03	0.23±0.03	0.15±0.05	0.15±0.05	0.3	1	0.4	0.44±0.05	0.22±0.05
BCCT000402	1.00±0.10	0.50±0.05	0.30±0.10	0.25±0.10	0.20±0.15	0.5	1.5	0.6	0.80±0.05	0.24±0.05
BCCT000603	1.60±0.10	0.80±0.10	0.45±0.10	0.25±0.15	0.35±0.15	0.8	2.1	0.9	1.35±0.05	0.35±0.05
BCCT000805	2.00±0.10	1.25±0.10	0.50±0.10	0.35±0.20	0.35±0.20	1.2	3	1.3	1.80±0.05	0.35±0.05
BCCT001206	3.05±0.10	1.55±0.10	0.50±0.10	0.45±0.20	0.55±0.25	2.2	4.2	1.6	2.90±0.05	0.35±0.05
BCCT001210	3.05±0.10	2.55±0.10	0.55±0.10	0.50±0.20	0.50±0.20	2.2	4.2	2.8	2.90±0.05	0.35±0.05
BCCT001812	4.40±0.20	3.15±0.20	0.47±0.20	0.60±0.20	0.60±0.20	3.1	5.9	3	3.70±0.05	0.60±0.05
BCCT002010	5.00±0.20	2.50±0.20	0.60±0.10	0.65±0.20	0.65±0.20	3.5	6.1	2.8	4.50±0.05	1.15±0.05
BCCT002512	6.30±0.20	3.20±0.20	0.60±0.10	0.65±0.20	0.65±0.20	3.8	8	3.5	5.90±0.05	1.60±0.05

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Electrical Characteristics Resistance Range: <math>< 1\Omega</math>

Type	Rated Power at 70°C (W)	Rated Current (A) Max.	Overload Current (A) Max.	T.C.R (ppm /°C)	Resistance Range(mΩ)	Operating Temperature Range
					Tolerance (±%) ±1%,±5% E-24、E-96	
BCCT000201	1/20	0.70	1.76	±700	$100 \leq R < 200$	-55~125°C
				±500	$200 \leq R < 400$	
				±300	$400 \leq R < 600$	
				±250	$600 \leq R < 1000$	
BCCT000402	1/16	1.58	3.95	±1500	$25 \leq R < 37$	
				±1200	$37 \leq R < 60$	
				±600	$60 \leq R < 200$	
				±300	$200 \leq R < 400$	
				±250	$400 \leq R < 600$	
				±200	$600 \leq R < 1000$	
BCCT000603	1/10	3.16	7.91	±1500	$10 \leq R < 37$	
				±1200	$37 \leq R < 60$	
				±600	$60 \leq R < 100$	
				±300	$100 \leq R < 200$	
				±600	$200 \leq R < 500$	
				±400	$500 \leq R < 1000$	
BCCT000805	1/8	3.53	8.82	±1500	$10 \leq R < 19$	
				±1200	$19 \leq R < 33$	
				±800	$33 \leq R < 50$	
				±600	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	
BCCT001206	1/3	5.77	14.42	±1500	$10 \leq R < 19$	-55~155°C
				±1200	$19 \leq R < 25$	
				±1000	$25 \leq R < 50$	
				±600	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	
BCCT001210	1/2	7.07	17.67	±1500	$10 \leq R < 19$	
				±1000	$19 \leq R < 25$	
				±700	$25 \leq R < 50$	
				±400	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	
BCCT001812	3/4	8.66	21.65	±1500	$10 \leq R < 19$	
				±1200	$19 \leq R < 25$	
				±900	$25 \leq R < 50$	
				±500	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	
BCCT002010	3/4	8.66	21.65	±1500	$10 \leq R < 19$	
				±1200	$19 \leq R < 25$	
				±900	$25 \leq R < 50$	
				±500	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	

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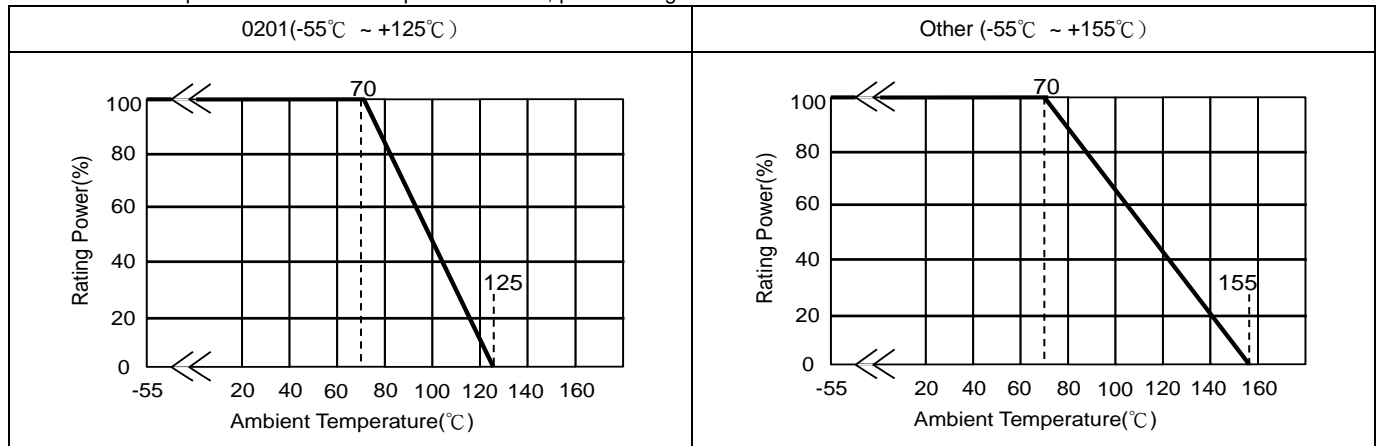
Electrical Characteristics Resistance Range: $\lt; 1\Omega$

Type	Rated Power at 70°C (W)	Rated Current (A) Max.	Overload Current (A) Max.	T.C.R (ppm /°C)	Resistance Range(mΩ)	Operating Temperature Range
					Tolerance (±%) ±1%, ±5% E-24 · E-96	
BCCT002512	1	10	25	±1500	$10 \leq R < 19$	-55~155°C
				±1200	$19 \leq R < 25$	
				±900	$25 \leq R < 50$	
				±500	$50 \leq R < 100$	
				±200	$100 \leq R < 1000$	

Note: When ordering, please specify tolerance code. Tolerance: F=±1%, J=±5%

- Power Derating Curve: Operating Temperature Range: -55 ~ +155 °C, or (0201: -55°C ~ +125°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: I: Rating Current.(A) , P: Rating Power.(W), R: Nominal Resistance.(Ω)

$$I = \sqrt{P/R}$$

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