

## Type BRI3D (1.2 ~ 47) $\mu$ H

- # Low profile and high current
- # Low cost
- # Magnetically shielded
- # RoHS Compliant



TFC Part No.	Marking	Inductance L ( $\mu$ H)	Test Freq. (0.1V)	DCR max.(Typ.) (m $\Omega$ )	Saturation rated current (A) max.		Temperature rise current (A) max.
					20°C	100°C	
BRI3D12 - 1R2N	1.2	100 KHz	81 (65)	1.60	1.40	1.30	
BRI3D12 - 1R5N	1.5	100 KHz	100 (80)	1.40	1.20	1.10	
BRI3D12 - 2R2N	2.2	100 KHz	125 (100)	1.20	0.90	0.92	
BRI3D12 - 2R7N	2.7	100 KHz	188 (150)	1.10	0.85	0.87	
BRI3D12 - 3R9N	3.9	100 KHz	256 (205)	1.00	0.80	0.83	
BRI3D12 - 4R7N	4.7	100 KHz	287 (230)	0.90	0.70	0.80	
BRI3D12 - 5R6N	5.6	100 KHz	380 (305)	0.80	0.60	0.75	
BRI3D12 - 6R8N	6.8	100 KHz	450 (360)	0.70	0.55	0.65	
BRI3D12 - 8R2N	8.2	100 KHz	500 (400)	0.60	0.50	0.55	
BRI3D12 - 100M	10.0	100 KHz	650 (520)	0.50	0.35	0.45	
BRI3D12 - 120M	12.0	100 KHz	687 (550)	0.45	0.30	0.40	
BRI3D12 - 150M	15.0	100 KHz	787 (630)	0.40	0.27	0.37	
BRI3D12 - 180M	18.0	100 KHz	875 (700)	0.35	0.25	0.35	
BRI3D12 - 220M	22.0	100 KHz	962 (770)	0.30	0.20	0.30	
BRI3D15 - 1R0N	1.0	100 KHz	78 (62)	2.00	1.80	1.80	
BRI3D15 - 1R5N	1.5	100 KHz	94 (75)	1.70	1.50	1.70	
BRI3D15 - 2R2N	2.2	100 KHz	106 (85)	1.40	1.20	1.60	
BRI3D15 - 2R7N	2.7	100 KHz	118 (95)	1.30	1.10	1.50	
BRI3D15 - 3R3N	3.3	100 KHz	131 (105)	1.10	1.00	1.40	
BRI3D15 - 3R9N	3.9	100 KHz	143 (115)	1.00	0.90	1.30	
BRI3D15 - 4R7N	4.7	100 KHz	162 (130)	0.95	0.85	1.20	
BRI3D15 - 5R6N	5.6	100 KHz	175 (140)	0.90	0.80	1.10	
BRI3D15 - 6R8N	6.8	100 KHz	212 (170)	0.85	0.75	1.00	
BRI3D15 - 8R2N	8.2	100 KHz	237 (190)	0.80	0.70	0.95	
BRI3D15 - 100M	10.0	100 KHz	262 (210)	0.70	0.5	0.90	
BRI3D15 - 120M	12.0	100 KHz	350 (280)	0.60	0.45	0.80	
BRI3D15 - 150M	15.0	100 KHz	456 (365)	0.55	0.42	0.75	
BRI3D15 - 180M	18.0	100 KHz	506 (405)	0.50	0.40	0.70	
BRI3D15 - 220M	22.0	100 KHz	575 (460)	0.45	0.37	0.55	
BRI3D15 - 270M	27.0	100 KHz	675 (540)	0.40	0.33	0.53	
BRI3D15 - 330M	33.0	100 KHz	937 (750)	0.35	0.30	0.50	

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					20°C	100°C	
<b>BRI3D18 - 1R2N</b>	1.2	100 KHz	88 (70)	2.00	1.80	1.90	
<b>BRI3D18 - 1R8N</b>	1.8	100 KHz	100 (80)	1.80	1.60	1.80	
<b>BRI3D18 - 2R2N</b>	2.2	100 KHz	113 (90)	1.60	1.40	1.70	
<b>BRI3D18 - 2R7N</b>	2.7	100 KHz	125 (100)	1.40	1.20	1.55	
<b>BRI3D18 - 3R3N</b>	3.3	100 KHz	138 (110)	1.20	1.10	1.45	
<b>BRI3D18 - 3R9N</b>	3.9	100 KHz	150 (120)	1.10	1.00	1.35	
<b>BRI3D18 - 4R7N</b>	4.7	100 KHz	162 (130)	1.00	0.90	1.25	
<b>BRI3D18 - 5R6N</b>	5.6	100 KHz	181 (145)	0.95	0.85	1.15	
<b>BRI3D18 - 6R8N</b>	6.8	100 KHz	200 (160)	0.90	0.80	1.05	
<b>BRI3D18 - 8R2N</b>	8.2	100 KHz	225 (180)	0.80	0.75	0.95	
<b>BRI3D18 - 100M</b>	10.0	100 KHz	250 (200)	0.75	0.70	0.85	
<b>BRI3D18 - 120M</b>	12.0	100 KHz	337 (270)	0.65	0.60	0.70	
<b>BRI3D18 - 150M</b>	15.0	100 KHz	393 (315)	0.60	0.55	0.65	
<b>BRI3D18 - 180M</b>	18.0	100 KHz	437 (350)	0.55	0.50	0.60	
<b>BRI3D18 - 220M</b>	22.0	100 KHz	563 (450)	0.50	0.45	0.55	
<b>BRI3D18 - 270M</b>	27.0	100 KHz	637 (510)	0.45	0.40	0.45	
<b>BRI3D18 - 330M</b>	33.0	100 KHz	712 (570)	0.40	0.35	0.40	
<b>BRI3D18 - 390M</b>	39.0	100 KHz	956 (765)	0.38	0.32	0.35	
<b>BRI3D18 - 470M</b>	47.0	100 KHz	1100 (880)	0.32	0.28	0.30	

### Electrical specification

#### Inductance range

BRI3D12 1.2~22 $\mu$ H 1.60~0.30A

BRI3D15 1.0~47 $\mu$ H 2.00~0.28A

BRI3D18 1.2~47 $\mu$ H 2.00~0.32A

#### Saturation rated current

The current when the inductance becomes 30% lower than its initial value, (Ta=20°C)

#### Temperature rise current

The current when temperature of coil increases up to max.  $\Delta T=40^\circ\text{C}$ , (Ta=20°C)

#### Operating temperature

-20°C to 80°C

#### Test equipment and set up

L tested by Agilent 4284A Precision LCR meter

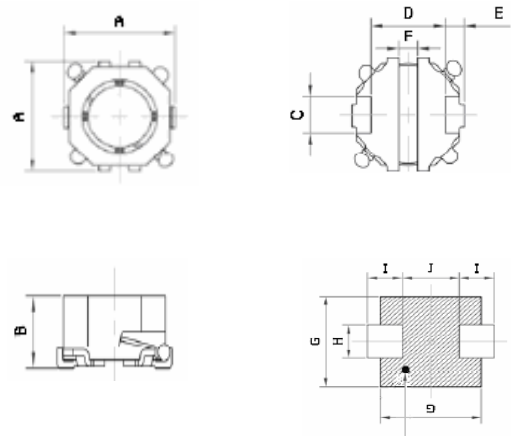
DCR tested by Milli-ohm meter

Electrical specifications at 25°C

<b>BRI3D dimensions (mm)</b>	<b>A</b>	<b>B (max.)</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>
<b>BRI3D12</b>	3.8±0.2	1.2	1.1	2.4	0.7	0.6	4.0	1.5	1.4	2.0
<b>BRI3D15</b>	3.8±0.2	1.5	1.1	2.4	0.7	0.6	4.0	1.5	1.4	2.0
<b>BRI3D18</b>	3.8±0.2	1.8	1.1	2.4	0.7	0.6	4.0	1.5	1.4	2.0

**Ordering information :**
**BRI3D12 - 220 M**
**(1) (2) (3)**

- (1) **Type:** Surface Mountable Type.  
 Style: Copper Base with DR core and RI core,  
 3D is 3.8mm square and 12 is about 1.2mm high
- (2) **Inductance:** : 220 for 22.0 uH
- (3) **Inductance tolerance:** N: ± 30%; M: ± 20%

**BRI3D drawing**


Wire in a slash part is forbidden