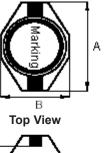
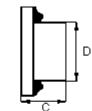
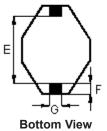
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Configurations and Dimensions





Side View



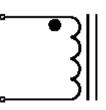


А 12.95 mm 9.5 mm (Max.) В С 5.2 mm D 8.4 ±0.3 mm -Е 7.62 mm F (Ref.) 2.54 mm G

Schematic Diagram

RoHS

Compliant



Note:

1. Wire Ø0.28mm × 2P 2UEWF 155°C 2. 7.5TS (Reference)

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm	G mm
Specification	12.95 (Max.)	9.5 (Max.)	5.2 (Max.)	8.4 ±0.3	7.62 (Ref.)	2.54 (Ref.)	2.54 (Ref.)
1	12.75	9.21	4.78	8.5	7.62	2.52	2.53
2	12.73	9.22	4.8	8.48	7.6	2.51	2.52
3	12.78	9.2	4.81	8.51	7.61	2.53	2.53
4	12.8	9.18	4.8	8.52	7.62	2.5	2.51
5	12.74	9.2	4.79	8.49	7.59	2.52	2.52
Average	12.76	9.2	4.8	8.5	7.61	2.52	2.52

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Suggest PCB Layout

Dimensions : Millimetres

Marking: 1R5

Electrical Characteristics (at 25°C)

Test Condition		
100 KHz 0.1 V	L	1.5 µH ±20%
at 25°C	DCR	18 mΩ (Max.)
100 KHz 0.1 V I _{rms} = 7.22 A	L at I _{rms}	Δ T 40°C (Max.)

Operating temperature : -55°C to +130°C

Note : I_{rms} : Temperature rise 40°C

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Electric Characteristics 1.6 1.2 1.0 0.8 0.6 0.4 0 1.50

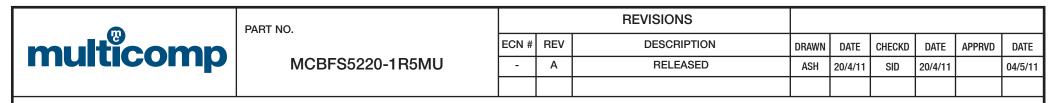
Test Data for Electrical	
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	Test Item	L µH	DCR mΩ	L at I _{rms} μΗ
	Condition	100 KHz 0.1 V	at 25°C	100 KHz 0.1 V I _{rms} = 7.22 A
	Specification	1.5 ±20%	18 (Max.)	∆T 40°C (Max.)
8.0	1	1.41	14.41	
	2	1.48	14.4	
	3	1.42	14.52	ОК
Direct Current (A)	4	1.43	14.48	
1.50	5	1.45	14.36	
▲1.45 ▲	Average	1.44	14.43	ОК
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Reliability Test

Test Item		Specifications				Test Method	d and Remarks				
Solderability	The electrodes with new solder	shall be at least 90% cove coating.	ered	According to IE Soldering temp Solder Flux Immersion time	perature		u0.7%				
Soldering heat resistance	Appearance Inductance cha	: No damage nge : Within ±10% of	initial value	Preheat tempe Preheat time Solder temper Dipping time Measured at re	ature	I50°C : 1 min : 260 ±5°C : 10 ±1 s	acing for 24 hours.				
Vibration (Out LAB)	Appearance All electrical and	: No damage d mechanical parameters	within tolerance.	Frequency Amplitude Direction and t	ime X Y	202 Method 204 : 10 to 55 Hz : 1.52 mm ⁷ and Z direction f	for 2 hours each.				
Humidity resistance test	Appearance All electrical and	: No damage d mechanical parameters	within tolerance.	According to IE Temperature Humidity Test time The componer		: 40 ±2°C : 90%-95% RH : 500 ±2 hrs	l normal condition for 24	hours bef	fore test.		
High temperature resistance test	Appearance All electrical and	: No damage d mechanical parameters	within tolerance.	According to IE Temperature Test time The componer		: 85 ±3°C : 500 +24 hrs	normal condition for 24	hours bef	fore test.		
Low temperature resistance test	Appearance All electrical and	: No damage d mechanical parameters	within tolerance.	Temperature Test time		1 Method A (Ad) : -40 ±3°C : 500 +24 hrs d be stabilized at	normal condition for 24	hours bef	fore test.		
Temperature cycles test	Appearance All electrical and	: No damage d mechanical parameters	within tolerance.	High-temperati Room-temperati Low-temperati Room-temperati Number of cyc	ure ature ure ature ile	14 Method N (Nb : 85 ±3°C dura : 25 ±2°C dura : -40 ±3°C dura : 25 ±2°C dura : 10 cycles d be stabilized at	tion 30 mins tion 3 hrs ation 30 mins	hours bef	fore test.		
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Material List

No.	ltem	Material Description				
1	1 Core R5A DR4.8 × 4 R5A RI 8.4 × 4.1 ×					
2	Wire	Ø0.28 mm × 2P 2UEWF (155°C)				
3	Solder (Lead-free)	Sn99.3% / Cu0.7%				
4	Glue	TH320D / TH320-3				
5	Base	SN-BS019.01 LCP				

Part Number Table

Description	Part Number
Inductor, 1.5µH, 20%, 6.7A	MCBFS5220-1R5MU

http://www.element14.com

http://www.farnell.com

http://www.newark.com

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