## **Inductor**

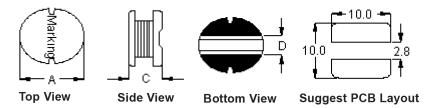
## multicomp PRO



# RoHS Compliant

Marking: 102

#### **Configurations and Dimensions**

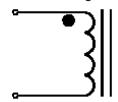


Dimensions: Millimetres

#### **Test Data for Mechanical**

Test Item	A mm	C mm	D mm
Specification	9.8 (Max.)	5.8 (Max.)	2.9 (Ref.)
1	9.56	5.54	2.81
2	9.54	5.61	2.83
3	9.52	5.57	2.79
4	9.49	5.53	2.76
5	9.51	5.58	2.84
Average	9.52	5.57	2.81

#### **Schematic Diagram**



Note:

- (1) Wire  $\emptyset$ 0.17mm × 1P 2UEF1/U 155°C
- (2) 147.5TS (Reference)

#### **Electrical Characteristics**

Test Condition		
1kHz 1V	L	1µH ±10%
at 25°C	DCR	3.1Ω (Max)
1kHz 1V Irms = 0.23A	ΔΤ	Temperature rise 40°C (Max.)

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

#### **Material List**

No.	Item	Material Description
1	Core	K22 DRM 9.5 × 5.5 RB-R B = 4.5 F = 3
2	Wire	Ø0.17mm × 1P 2UEF1/U (155°C)
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro



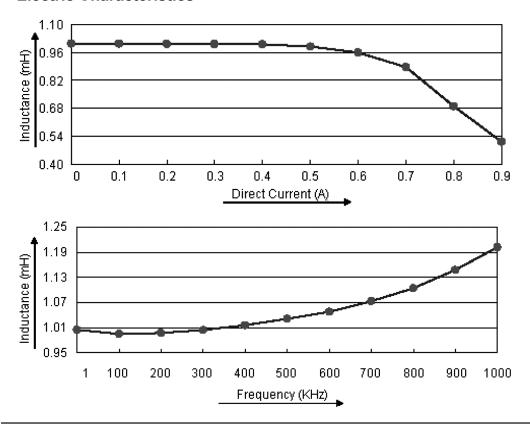
## Inductor



#### **Reliability Test**

Test Item	Specifications		Test Method and Remarks	
Operating temperature range	-55°C to +130°C		Including temperature	rise due to self-generated heat.
Storage condition	Ambient temperature Humidity	: 0°C to 40°C : Below 70% RH	To maintain the solderability of terminal electrodes, care must be taken to control temperature and humidity in the storage area.	
Moisture sensitivity	Appearance  DCR change Inductance change	: No abnormality No damage : Within ±20% : Within ±20%	According to J-STD-02 Test condition Test duration Recovery	OB level 3 : 60°C 60% RH : 40 hrs : 1 to 2 hours of recovery under the standard condition after the removal from the test chamber.
Solderability	All termination shall exhibit a continuous solder coating free from defects for a minimum of 95% of the surface area of any individual lead.		According to J-STD-00 Steam aging category Steam aging duration Solder Solder temperature Dip time	: 97°C 98% RH

#### **Electric Characteristics**



Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro



### Inductor



#### **Test Data for Electrical**

Test Item	L mH	DCR Ω	ΔΤ
Condition	1kHz 1V	at 25°C	1kHz 1V Irms = 0.23A
Specification	1 ±20%	3.1 (Max.)	Temperature rise 40°C (Max.)
1	0.99	2.37	
2	1	2.38	
3	l	2.30	OK
4	0.99	2.39	
5	0.99	2.37	
Average	0.99	2.38	OK

#### **Part Number Table**

Description	Part Number
Inductor, 1000µH, 10%, SMD	MCSDC1006-102KU

Important Notice: This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro

