

Shielded SMD Power Inductors **multicomp**^{PRO}

**RoHS
Compliant**



Features

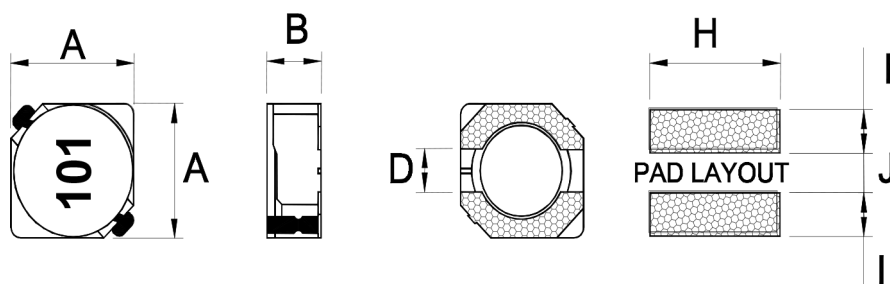
- Directly connected electrode on ferrite core
- Available in magnetically shielded
- Low DC resistance
- Suitable for large current
- Available on tape and reel for auto surface mounting

Applications

- Power Supply For VTRs
- OA Equipment
- Notebook PCs
- Portable Communication Equipment
- DC/DC Converters, etc.

Characteristics

- Rated DC Current: The current when the inductance becomes 35% lower than its initial value or the current when the temperature of coil increases to $\Delta 40^{\circ}\text{C}$. The smaller one is defined as Rated DC
- Current. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: -40°C to 125°C



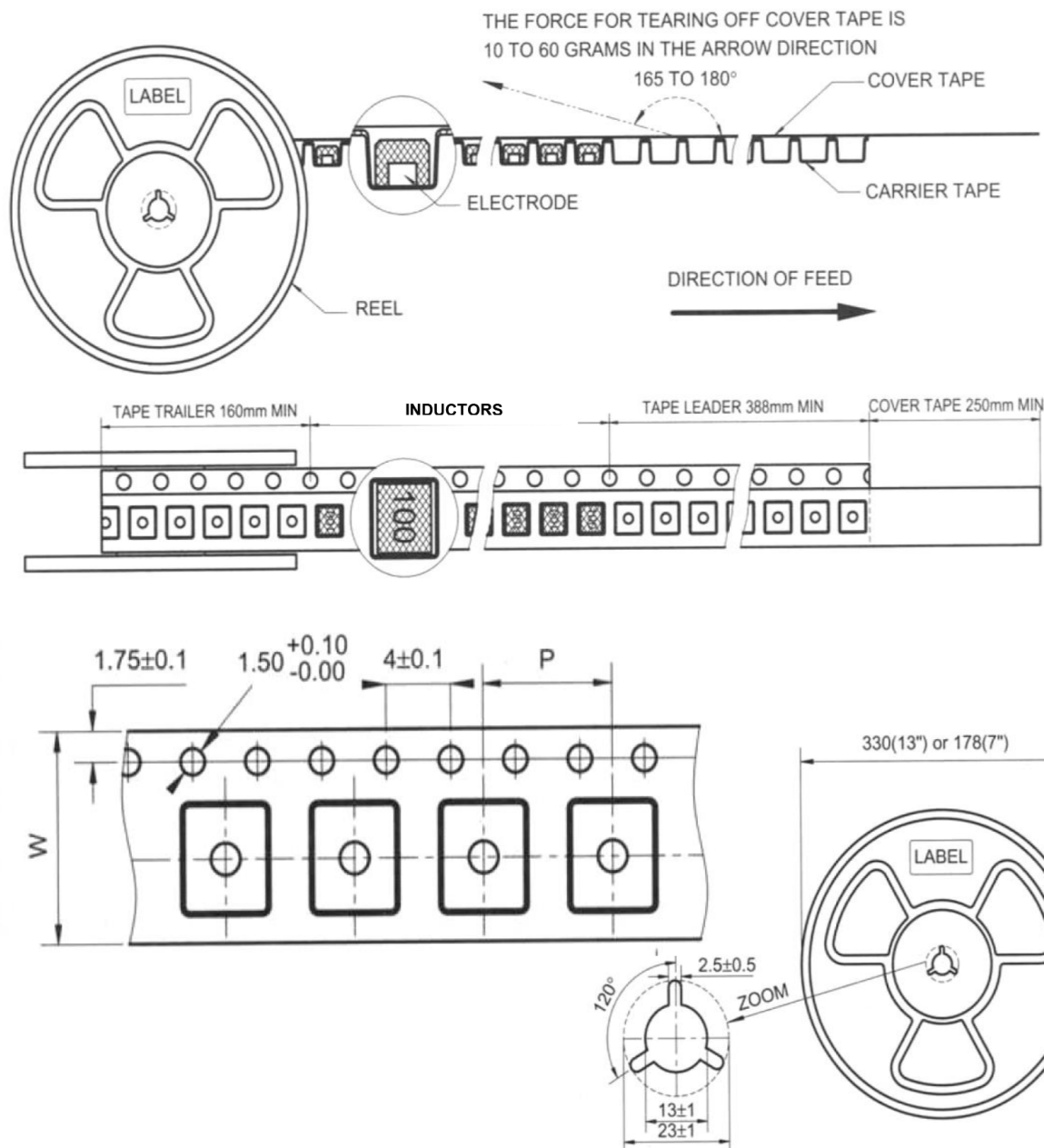
Dimensions

Unit: mm

Code	A	B max.	D	H	I	J
28	4.7 $\pm$ 0.3	3	1.5	5.3	1.9	1.5
38	6.7 $\pm$ 0.3	4	2	7.3	2.65	2

Shielded SMD Power Inductors **multicomp**PRO

Tape and Reel specifications



Shielded SMD Power Inductors **multicomp**PRO

Unit: mm

Code	Tape size		Parts Per Reel
	W	P	13"
28	12	8	2000
38	16	12	1000

SMT Power Inductor Environmental Specifications

General

Items	Specifications
Shelf Storage conditions	Temperature range: 15°C to 28°C ; Humidity: <80% relative humidity. Recommended product should be used within one year from the time of delivery.

Environmental test

Test Items	Specifications	Test Conditions / Test Methods
High temperature Storage test	No case deformation or change in appearance. $\Delta L/L \leq 10\%$	Temperature 85±2°C, Time: 48±2 hours, Tested after 1 hour at room temperature.
Low temperature Storage test		Temperature -25±2°C, Time: 48±2 hours, Tested after 1 hour at room temperature.
Humidity test		Temperature 40±2°C, 90% to 95% relative humidity Time: 96±2 hours Tested after 1 hour at room temperature.
Thermal shock test		First -25°C 30 minutes then 25°C 10 minutes last 85°C 30 minutes, as 1 cycle. Go through 5 cycles. Tested after 1 hour at room temperature.

Mechanical test

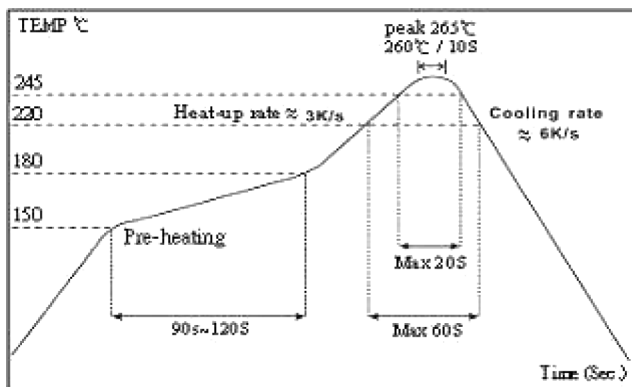
Test Items	Specifications	Test Conditions / Test Methods
Solderability test	Terminal area must have 90% minimum solder coverage.	Dip pads in flux then dip in solder pot (SnCuNi) at 245±5°C for 3 seconds.
Resistance to Soldering Heat	No case deformation or change in appearance.	Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature of 130°C to 150°C. Immersing to 260±5°C for 10 seconds.
Vibration test	No case deformation or change in appearance. $\Delta L/L \leq 10\%$	Apply frequency 10Hz to 55Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours.
Shock resistance		Drop down with 981m/s ² (100G) shock attitude upon a rubber block method shock testing machine, for 1 time. In each of three orientations.

Shielded SMD Power Inductors **multicomp**PRO

Electrical Characteristics

Part No	Code	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
MP002873	28	3.3	30%	100kHz, 0.1V	0.049	1.57
MP002874		10	20%		0.128	1
MP002875		18			0.166	0.72
MP002876	38	10		10kHz, 0.1V	0.038	2
MP002877		82	0.324		0.7	
MP002878		100	0.368		0.65	

The condition of reflow (recommendation)



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.