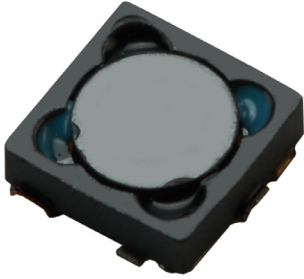


Shielded SMD Power Inductors **multicomp**PRO

RoHS
Compliant



Features

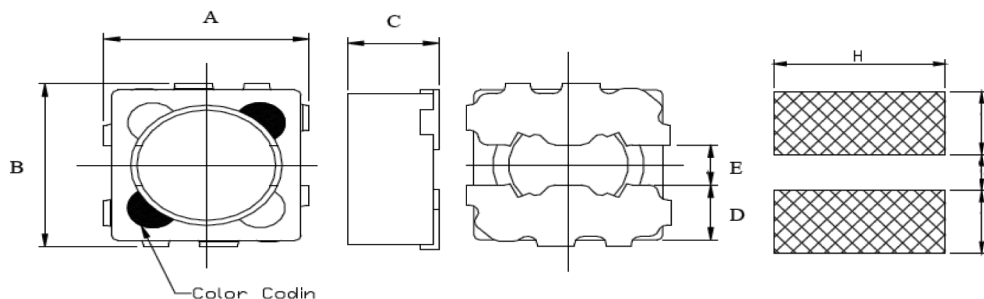
- Low profile, low RDC, lower resistance and high current handling capacities
- Flat bottom surface ensures secure, reliable mounting
- Magnetically shielded structure that ensures the high-density mounting configurations

Applications

- PDA, DSC, PDA And Other Electronic Equipments
- Hard Disk Drives
- Low Profile/ Low Resistance Specifically Suitable For Portable Telephones

Characteristics

- Saturation Rated Current(IDC): The current when the inductance becomes 10% or 35% lower than its initial value.
- Temperature Rise Current (I_{rms}): For a 25°C rise above 25°C ambient.
- Operating temperature range: -25°C to 105°C



Dimensions

Unit: mm

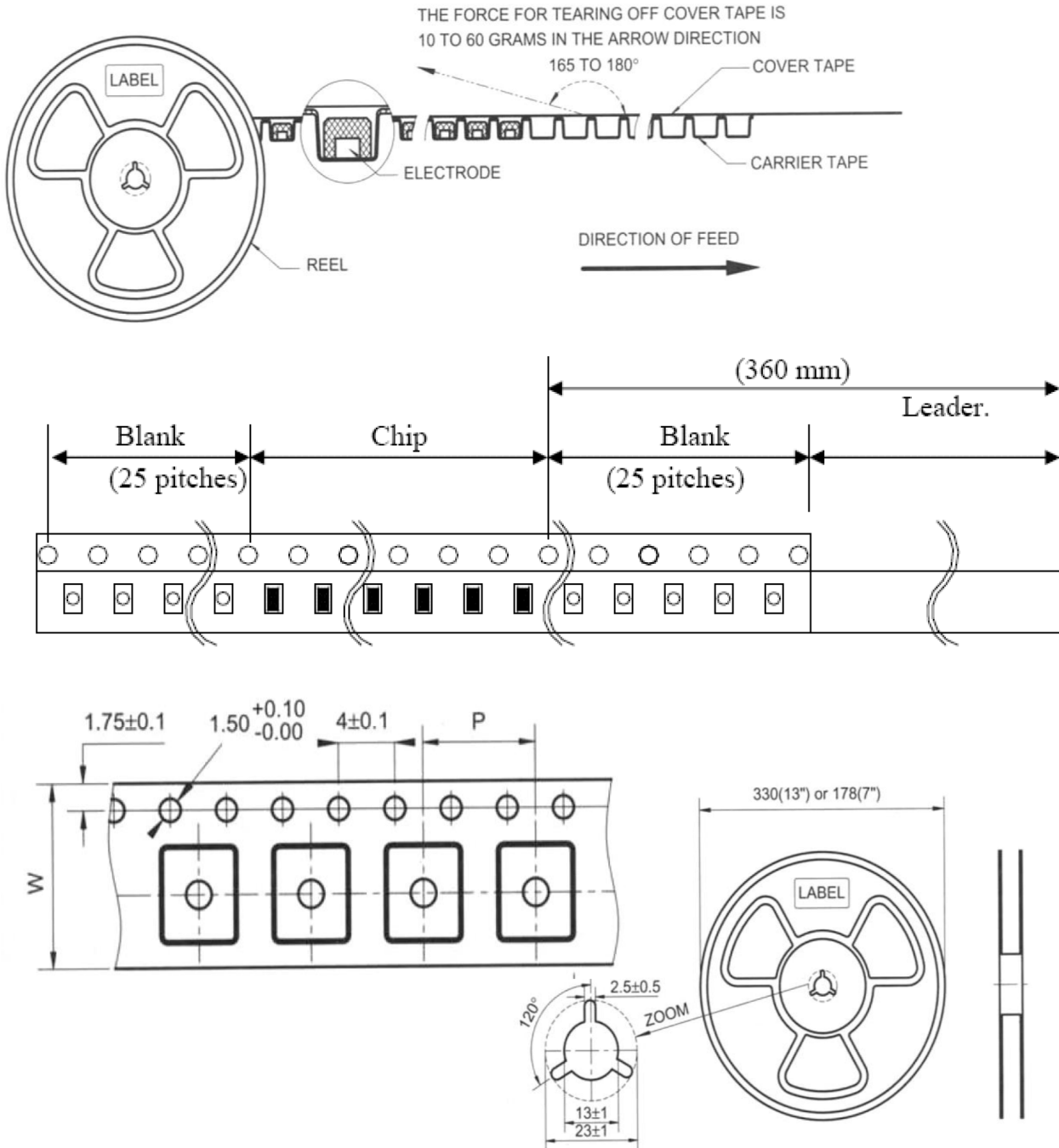
| Code | A | B | C max. | D | E | H | I | J |
|------|---------|---------|-----------|-----|-----|-----|-----|-----|
| 10 | 3.2±0.2 | 3.2±0.2 | 1.05 | 1.1 | 0.8 | 3.6 | 1.4 | 0.8 |
| 18 | 4.2±0.2 | 4.2±0.2 | 1.8 | 1.3 | 1.4 | 4.6 | 1.6 | 1.4 |

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

multicompPRO

Shielded SMD Power Inductors **multicomp** PRO

Tape and Reel specifications



Shielded SMD Power Inductors **multicomp** PRO

Unit: mm

| Case Code | Tape size | | Parts Per Reel |
|-----------|-----------|---|----------------|
| | W | P | 7" |
| 10 | 12 | 8 | 1000 |
| 18 | | | |

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

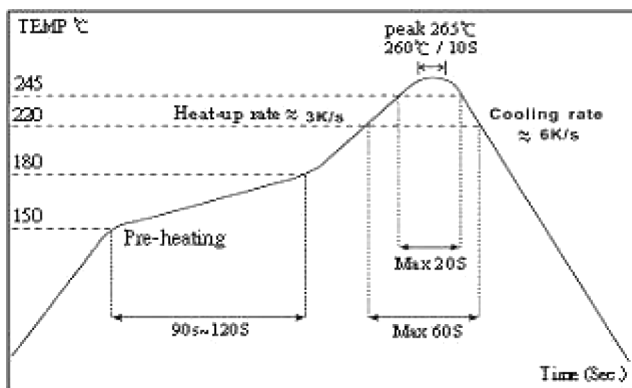
| Test Items | Specifications | Test Conditions / Test Methods |
|------------------------------|--|--|
| Solderability test | Terminal area must have 90% minimum solder coverage. | Product with Lead-free terminal: Dip pads in flux then dip in solder pot at 245±5°C for 3 seconds. |
| Resistance to Soldering 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 (μ H) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) Typ. | | I rms (A) Typ. | Colour Code |
|----------|------|-----------------|-----------|-------------------|--------------------------|-----------------|------------|-------------------|-------------|
| | | | | | | L drop 10% | L drop 35% | | |
| MP002871 | 10 | 6.8 | 20% | 1kHz, 1V | 0.33 | 0.46 | 0.6 | 0.7 | White |
| MP002872 | 18 | 10 | | | 0.165 | 0.9 | 1.1 | 1.05 | Red |

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.