

**FEATURES**



- Dual inductor in one package
- Ferrite based and magnetic shielded construction
- Low magnetic coupling between inductors
- Operating temperature -40°C to 155°C (including self-heating)
- Surface mount device

**APPLICATIONS**

- Class-D audio amplifier
- LPF for digital amplifier for low distortion and best sound quality



**ELECTRICAL SPECIFICATIONS**

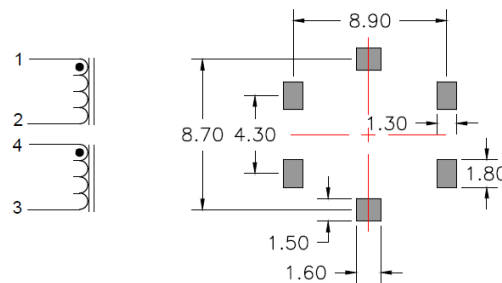
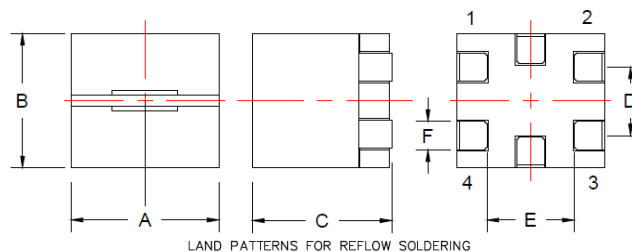
| PART NUMBER    | Inductance (μH)<br>@ 100 KHz/0.1V, ±20% |       |       | DCR MAX<br>(mΩ) | Saturation<br>Current(A) | Temperature<br>Rise Current(A) |
|----------------|-----------------------------------------|-------|-------|-----------------|--------------------------|--------------------------------|
|                | MIN                                     | NOM   | MAX   |                 |                          |                                |
| MCD1010100M-10 | 8.00                                    | 10.00 | 12.00 | 14.50           | 6.5                      | 5.3                            |
| MCD1010150M-10 | 12.00                                   | 15.00 | 18.00 | 23.65           | 5.4                      | 4.5                            |
| MCD1010180M-10 | 14.40                                   | 18.00 | 21.60 | 31.35           | 4.6                      | 3.8                            |

1. Operating Temperature Range : -40°C to +155°C (including self-heating)
2. Storage Temperature Range : +5°C to +40°C
3. Saturation Current is DC Current at which the inductance drops approximate 25% from its value without current.
4. Temperature Rise Current is DC Current at which temperature increase less than 55°C from ambient temperature 25°C

**SHAPES AND DIMENSIONS**

Unit:mm

| A            | B            | C         | D         | E         | F         |
|--------------|--------------|-----------|-----------|-----------|-----------|
| 10.00 ± 0.20 | 10.00 ± 0.20 | 14.00 Max | 5.00 Typ. | 7.50 Typ. | 1.50 Typ. |



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Asia: +86.757.2563.8860

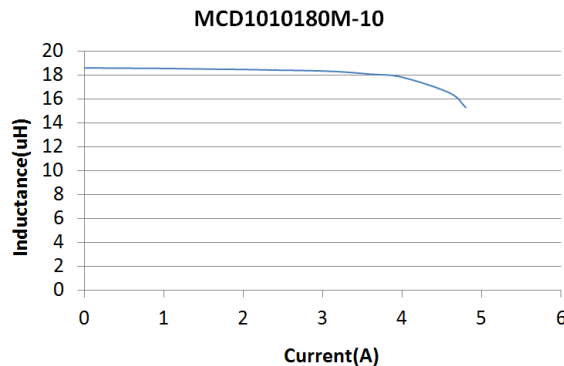
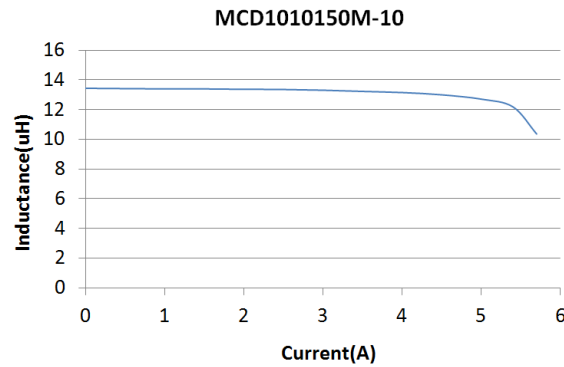
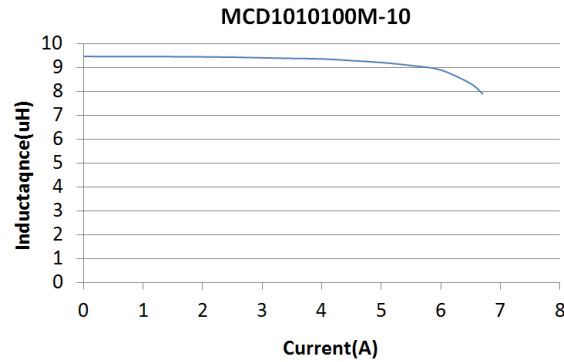
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**PART NUMBER SYSTEM EXAMPLE**

|                     |                |                        |                           |                                            |
|---------------------|----------------|------------------------|---------------------------|--------------------------------------------|
| <u>MCD</u>          | <u>1010</u>    | <u>100</u>             | <u>M</u>                  | <u>-10</u>                                 |
| Product Series Code | Part Size Code | Inductance (i.e. 10μH) | Tolerance % (i.e. M:±20%) | Standard Part(-10)<br>Automotive Part(-15) |

**TYPICAL CHARACTERISTICS**



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