Laird
Smart Technology. Delivered.

Ferrite Based Dual Inductors
MCD1010 Series

FEATURES

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

APPLICATIONS

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

ELECTRICAL SPECIFICATIONS

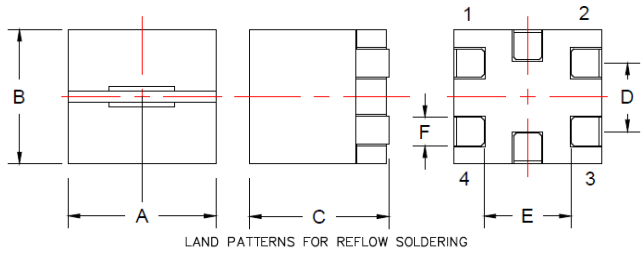
PART NUMBER	Inductance (μH) @ 100 KHz/0.1V, ±20%			DCR MAX (mΩ)	Saturation Current(A)	Temperature Rise Current(A)
	MIN	NOM	MAX			
MCD1010100M-10	8.00	10.00	12.00	14.50	6.5	5.3
MCD1010150M-10	12.00	15.00	18.00	23.65	5.4	4.5
MCD1010180M-10	14.40	18.00	21.60	31.35	4.6	3.8

1. Operating Temperature Range : -40℃ to +155℃ (including self-heating)
2. Storage Temperature Range : +5℃ to +40℃
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℃ from ambient temperature 25℃

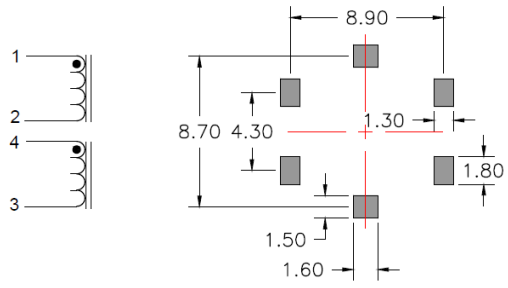
SHAPES AND DIMENSIONS

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.



LAND PATTERNS FOR REFLOW SOLDERING



USA: +1.423.308.1690
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Asia: +86.757.2563.8860

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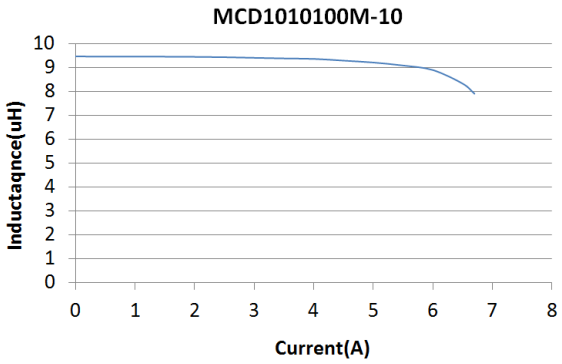
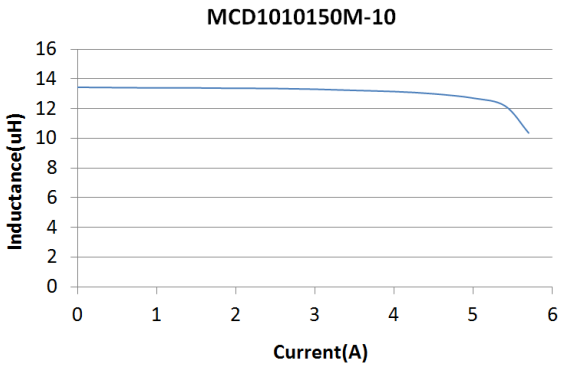
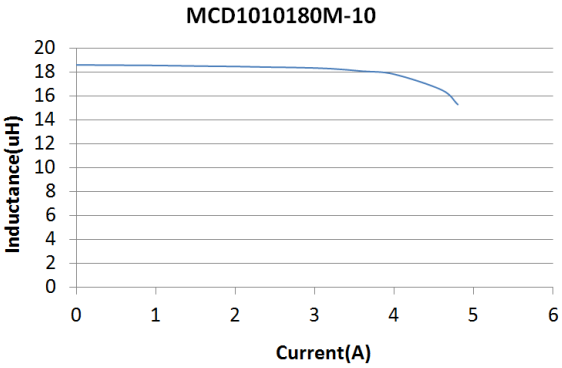
PART NUMBER SYSTEM EXAMPLE

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

TYPICAL CHARACTERISTICS







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