

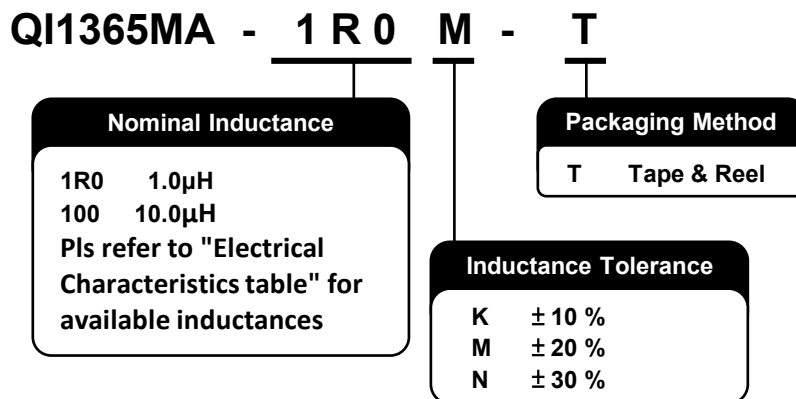
Features

- High performance (Isat) realized by metal bust core.
- Shielded construction.
- Handles high transient current spikes without saturation.
- Ultra Low buzz noise, due to composite construction.
- New technology hot-pressing.
- Ultra-high current, untra-low loss.
- External dimensions (L x W x H) : 13.45 x 12.6 x 6.5 mm
- RoHS compliant.
- AEC-Q200 qualified.
- Operating temperature range -55°C~+125°C.

Applications

- Automotive applications
- High current POL converter
- Battery powered devices
- DC/DC converters in distributed power systems

Ordering Information



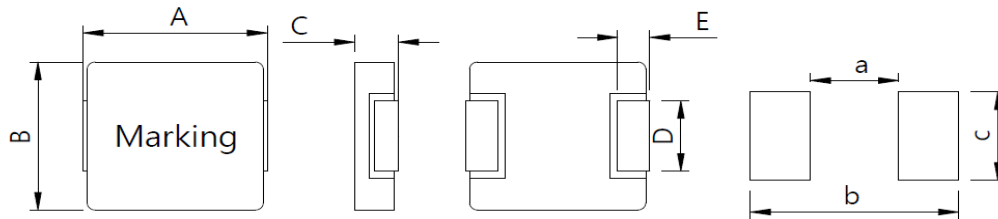
Electrical Characteristics

P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance ($\pm$ %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
QI1365MA-1R0M-T	1.0	100	20	2.0	45	29
QI1365MA-1R5M-T	1.5	100	20	3.0	40	24
QI1365MA-2R2M-T	2.2	100	20	4.5	37	19
QI1365MA-3R3M-T	3.3	100	20	6.8	23	16.5
QI1365MA-4R7M-T	4.7	100	20	11.2	22	14
QI1365MA-5R6M-T	5.6	100	20	12.8	20	13
QI1365MA-6R8M-T	6.8	100	20	14	18.5	12
QI1365MA-8R2M-T	8.2	100	20	15.5	16	11.5
QI1365MA-100M-T	10	100	20	16.5	15	10
QI1365MA-150M-T	15	100	20	29	10	7.5
QI1365MA-220M-T	22	100	20	39.5	9.0	6.3

Note :

- All test data is referenced to 25°C ambient.
- Isat: DC current at which the inductance drops approximate 30%TYP from its value without current.
- Irms: DC current that causes the temperature rise ($\Delta T=40^{\circ}\text{C}$) from 25°C ambient.
- L tested by Wayne kerr 3260B LCR meter with Wayne kerr 3260B bias current source or equivalent.
- DCR tested by Milli-ohmmeter.
- Absolute maximum voltage 30VDC.

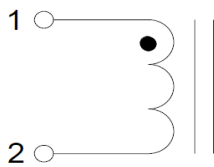
Shape And Dimensions



SUGGESTED PCB LAYOUT

A	B	C	D	E	a (Typ.)	b (Typ.)	c (Typ.)
13.45±0.35	12.6±0.4	6.5 Max.	See Remarks C	2±0.5	8	15.5	5.5

(Unit: mm)



SCHEMATIC DRAWING

Remarks C :

Nominal Inductance	D
1R0 、 2R2	3.85±0.5
3R3 、 4R7 、 5R6 、 6R8 、 8R2 、 100 、 150 、 220	5±0.4

Packing Specification

pcs / reel	Reel Size	Inner box (400*350*140mm)	Carton outside (430*380*320mm)
0.5K	13"	3K	6K