

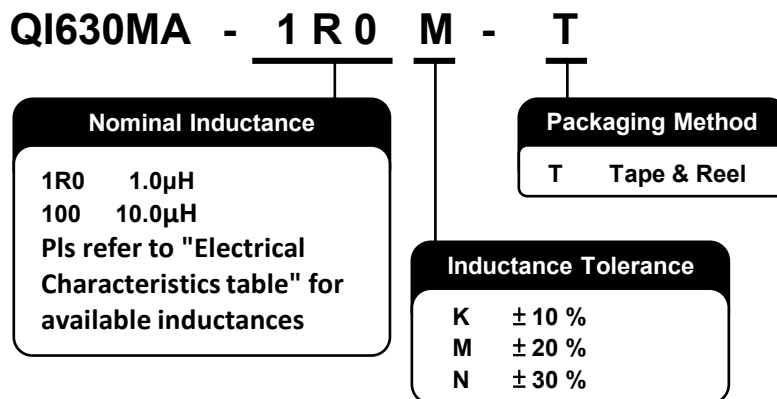
Features

- 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) : 7.1 x 6.6 x 3.0 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



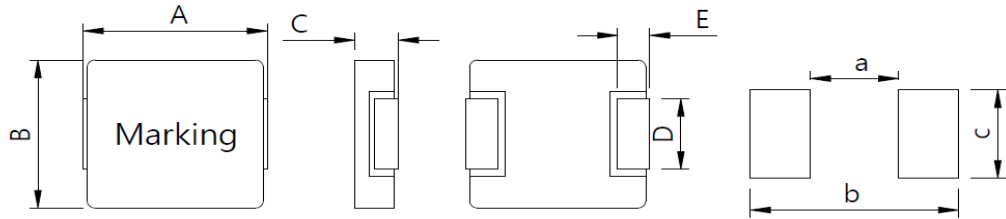
Electrical Characteristics

P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance ($\pm$ %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
QI630MA-R10M-T	0.10	100	20	1.8	45	29
QI630MA-R15M-T	0.15	100	20	2.5	40	24
QI630MA-R22M-T	0.22	100	20	3.0	34	19
QI630MA-R33M-T	0.33	100	20	3.9	30	17
QI630MA-R47M-T	0.47	100	20	4.1	20	16
QI630MA-R56M-T	0.56	100	20	4.5	18	15
QI630MA-R68M-T	0.68	100	20	5.3	17	14
QI630MA-R82M-T	0.82	100	20	6.0	16	13
QI630MA-1R0M-T	1.0	100	20	10	15	11
QI630MA-1R5M-T	1.5	100	20	15	14	9.0
QI630MA-2R2M-T	2.2	100	20	20	10	7.5
QI630MA-2R7M-T	2.7	100	20	30	10	6.0
QI630MA-3R3M-T	3.3	100	20	35	9.5	5.8
QI630MA-4R7M-T	4.7	100	20	40	6.5	5.5
QI630MA-5R6M-T	5.6	100	20	45	6.5	4.9
QI630MA-6R8M-T	6.8	100	20	60	6.0	4.5
QI630MA-8R2M-T	8.2	100	20	60	6.0	4.0
QI630MA-100M-T	10	100	20	68	5.0	3.8
QI630MA-150M-T	15	100	20	122	4.0	2.8

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.

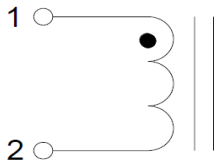
Shape And Dimensions



SUGGESTED PCB LAYOUT

A	B	C	D	E	a (Typ.)	b (Typ.)	c (Typ.)
7.1±0.3	6.6±0.2	3 Max.	3±0.5	1.6±0.5	3.7	8.4	3.5

(Unit: mm)



SCHEMATIC DRAWING

Packing Specification

pcs / reel	Reel Size	Inner box (400*350*140mm)	Carton outside (430*380*320mm)
1K	13"	6K	12K