

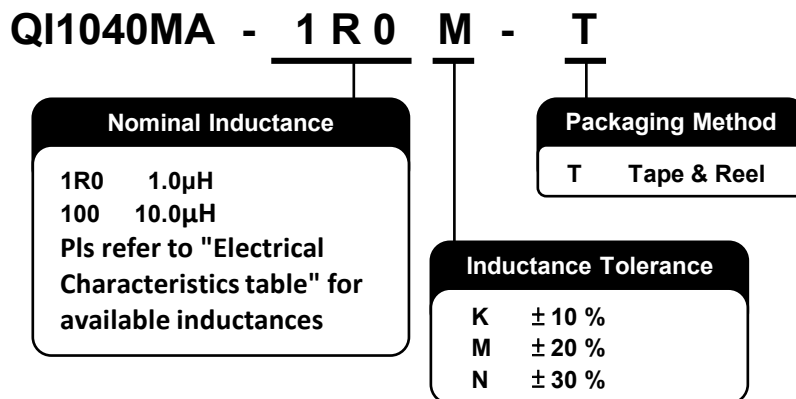
Features

- 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) : 11.1 x 10.0 x 4.0 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



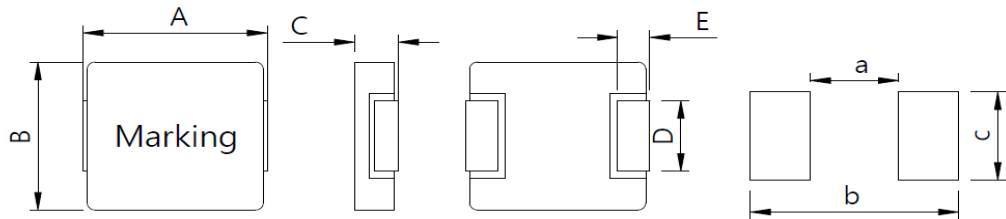
Electrical Characteristics

P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance ($\pm$ %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
QI1040MA-R15M-T	0.15	100	20	0.65	75	45
QI1040MA-R22M-T	0.22	100	20	1.0	50	38
QI1040MA-R36M-T	0.36	100	20	1.2	45	30
QI1040MA-R47M-T	0.47	100	20	1.7	40	27
QI1040MA-R56M-T	0.56	100	20	1.8	33	25
QI1040MA-R68M-T	0.68	100	20	2.4	30	23
QI1040MA-1R0M-T	1.0	100	20	3.2	27	20
QI1040MA-1R5M-T	1.5	100	20	4.2	22	16
QI1040MA-2R2M-T	2.2	100	20	7.0	17	14
QI1040MA-3R3M-T	3.3	100	20	11.8	16	11
QI1040MA-4R7M-T	4.7	100	20	20	15	9.0
QI1040MA-6R8M-T	6.8	100	20	25	12	8.5
QI1040MA-8R2M-T	8.2	100	20	30	9.0	8.0
QI1040MA-100M-T	10	100	20	30	8.5	7.5
QI1040MA-150M-T	15	100	20	45	7.0	6.5
QI1040MA-220M-T	22	100	20	66	5.5	5.0
QI1040MA-330M-T	33	100	20	92	5.0	4.4

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.

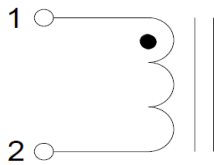
Shape And Dimensions



SUGGESTED PCB LAYOUT

A	B	C	D	E	a (Typ.)	b (Typ.)	c (Typ.)
11.1±0.4	10±0.3	4 Max.	3±0.5	2±0.5	5.4	13.6	4.1

(Unit: mm)



SCHEMATIC DRAWING

Packing Specification

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