

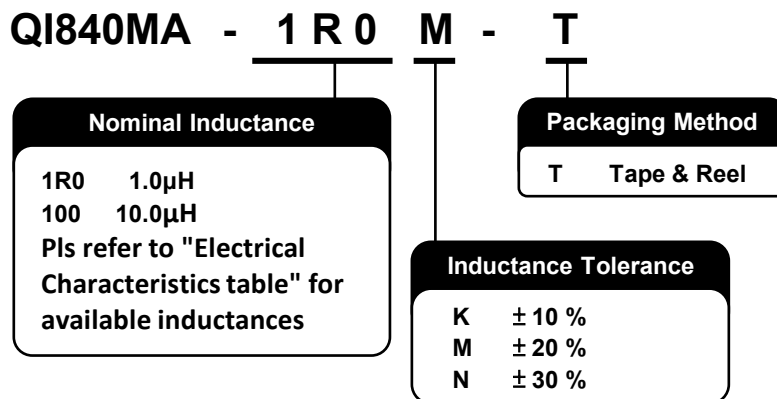
Features

- 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) : 8.3 x 8.1 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



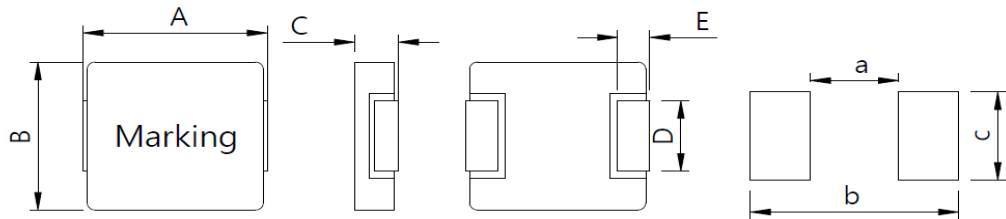
Electrical Characteristics

P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance ($\pm$ %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
QI840MA-R22M-T	0.22	100	20	1.8	60	36
QI840MA-R33M-T	0.33	100	20	2.4	45	30
QI840MA-R47M-T	0.47	100	20	2.8	37	25
QI840MA-R56M-T	0.56	100	20	3.2	26	23.5
QI840MA-R68M-T	0.68	100	20	3.8	24	21.5
QI840MA-R82M-T	0.82	100	20	4.4	21	20
QI840MA-1R0M-T	1.0	100	20	5.5	19	18
QI840MA-1R5M-T	1.5	100	20	7.6	17	16.5
QI840MA-1R8M-T	1.8	100	20	11	15	15
QI840MA-2R2M-T	2.2	100	20	11.4	14	13
QI840MA-3R3M-T	3.3	100	20	15	12.5	10.5
QI840MA-4R7M-T	4.7	100	20	26.5	11.5	8.5
QI840MA-5R6M-T	5.6	100	20	30	11	8.2
QI840MA-6R8M-T	6.8	100	20	36.8	9.0	7.0
QI840MA-8R2M-T	8.2	100	20	46	8.7	6.0
QI840MA-100M-T	10	100	20	59	8.0	5.5
QI840MA-150M-T	15	100	20	71	5.5	5.0
QI840MA-220M-T	22	100	20	113	5.0	3.7

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.

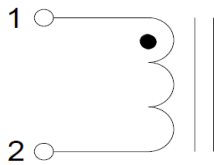
Shape And Dimensions



SUGGESTED PCB LAYOUT

A	B	C	D	E	a (Typ.)	b (Typ.)	c (Typ.)
8.3±0.4	8.1±0.4	4 Max.	3±0.5	1.6±0.5	4.1	10.3	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