

**TMDT20&25 Series ( Rev. 1.0)**



**Features**

- \* RoHS compliant
- \* Much lower resistance
- \* Much higher current rating
- \* High performance (Isat) realized by metal dust core

**Product Identification**

TMDT
252012
\_
2R2
M  
1
2
3
4

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: M=±20%

**Applications**

- \* Laptops and PCs
- \* Switches and servers
- \* Base stations
- \* DC/DC converters
- \* New energy vehicles/ 5G

**Operating & Storage Condition**

- \* Operating Temp. : -40 to +125°C
- \* Storage Temp. : -25 to +35°C
- \* Storage Life Time : 12 Months @25°C , RH 70%

**Test Equipment**

- \* Wayne kerr 3260B/G LCR Meter
- \* Wayne kerr 3265B Bias Current Source

**Standard Atmospheric Conditions**

- \* Ambient Temp : 20+/-15°C
- \* Relative Humidity : 65+/-20%

**Dimension & Recommended PAD Layout: [ mm ]**

	Top View	Side View	Bottom View	Pad Layout					
Size Code	A(±0.2)	B(±0.2)	C(max.)	D(typ.)	E(typ.)	F(typ.)	G(ref.)	H(ref.)	I(ref.)
201610	2.0	1.6	1.0	1.6	0.7	0.6	0.5	1.8	2.2
252010	2.5	2.0	1.0	2.0	0.9	0.7	0.6	2.1	2.6
252012	2.5	2.0	1.2	2.0	0.9	0.7	0.6	2.1	2.6

**Electrical Characteristics**

P/N	Inductance (uH) @1MHz/1.0V	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
TMDT201610-R47M	0.47	25.0	6.0	6.0
TMDT201610-1R0M	1.00	43.0	4.2	4.1
TMDT201610-2R2M	2.20	150.0	2.8	2.1
TMDT252010-1R0M	1.00	30.0	4.8	4.1
TMDT252012-1R0M	1.00	42.0	4.3	3.3
TMDT252012-2R2M	2.20	75.0	3.3	2.2

- \* I<sub>rms</sub> DC current (A) that will cause an approximate ΔT of 40°C
- \* I<sub>sat</sub> DC current (A) that will cause L to drop approximately 30%