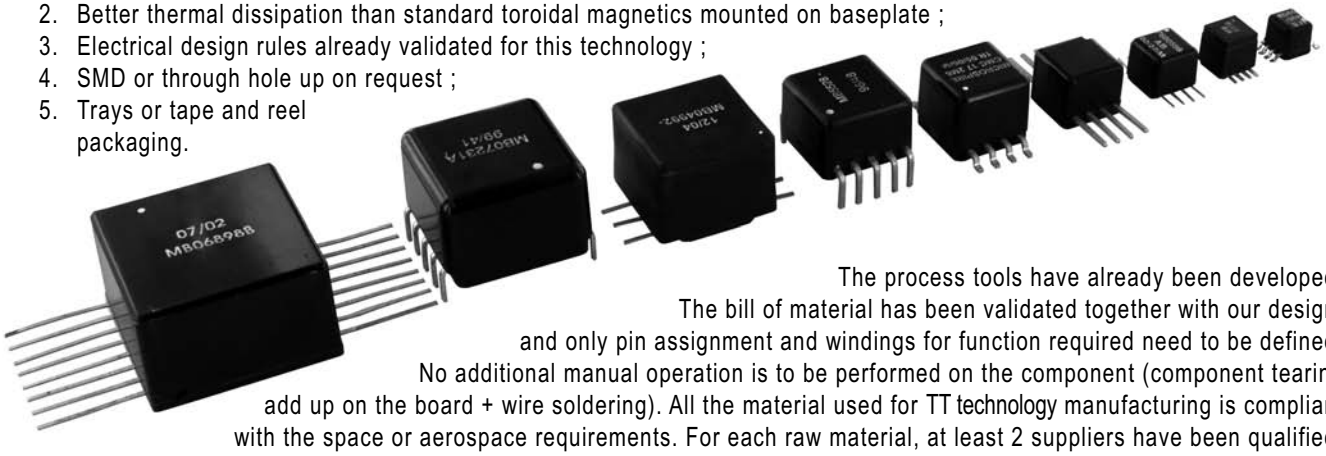
Toroidal Transfer Custom Magnetics

Toroidal **T**ransfer, the short time answer to your custom design with technology already qualified, without Non Recurent Cost

1. Strong space and aerospace history ;
2. Better thermal dissipation than standard toroidal magnetics mounted on baseplate ;
3. Electrical design rules already validated for this technology ;
4. SMD or through hole up on request ;
5. Trays or tape and reel packaging.



The process tools have already been developed. The bill of material has been validated together with our design, and only pin assignment and windings for function required need to be defined. No additional manual operation is to be performed on the component (component tearing add up on the board + wire soldering). All the material used for TT technology manufacturing is compliant with the space or aerospace requirements. For each raw material, at least 2 suppliers have been qualified.

All these packages have been undergoing to Microspire test programs :

1. Thermal shock, life tests, overload ;
2. Vibration and shock tests.

Technology characteristics

Operating / storage temperature : -55 °C / +125 °C

Soldering temperature : 260 °C (10s max)

Burn-in : +125 °C (+0 / -3 °C) during 168H

Life test : +125 °C (+0 / -3 °C) during 1000-2000H

Thermal shocks :
25-100 cycles -55 °C / +125 °C with 15 min / stage

Moisture resistance : > as per MIL-STD-202 method 106

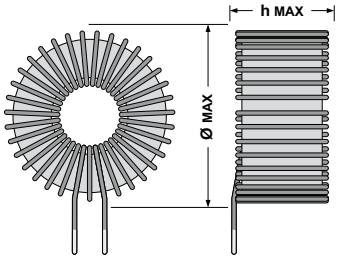
Heating : <25 °C above 90 °C

Applied standards : ESCC 3201 generic specification for space products

Max dimensions of your custom toroidal core into TT technology

Casing	Pin number	Connections	Wound core dimensions (max in mm) Ø x h
TT 05	6	SMD	4.1 x 2.3
TT 07	8	J, SMD	5.6 x 5.3
TT 08	4	SMD, Through-hole	13.8 x 6.3
TT 09	12	SMD	6.9 x 4.7
TT 12	8	SMD	9.35 x 4.9
TT 14	8	SMD	11.3 x 8.9
TT 17	8	SMD	14.2 x 11.6
TT 19	8	SMD	16.3 x 11.1
TT 20	16	SMD	16.5 x 11.1
TT 25	16	SMD	21.8 x 10.2
TT 26	16	Through-hole	21.8 x 23
TT 29	10	Through-hole	23.8 x 13.9
TT 33	10	Through-hole	27.1 x 14.6
TT 37	16	Through-hole	31.8 x 16.1
TT 40	16	Through-hole	34.8 x 21.8

Other casings available upon request



Standard functions in TT technology

Casing	Standard functions	Family	Characteristics	
TT 05	Common mode chokes	DLEF42	-10dB @ 10MHz	-23dB @ 100MHz
TT 05	Wide band RF transformers	WRFT4x	50Ω : 50Ω	50Ω : 800Ω
TT 07	SMD energy storage inductors	ESI01	2,6µH / 2A	150µH / 0.25A
TT 08	Current Transformer	CT08	8A / 200kHz / 2%	-
TT 14	Common mode chokes	CMC14	140µH / 7.2A	2.2mH / 2.2A
TT 17	Common mode chokes	CMC17	0.45mH / 11.7A	69mH / 1.1A