

Features

- Small size, High current and very low loss
- Ultra low buzz noise, due to composite construction
- RoHS, Halogen Free and REACH Compliance
- Soft saturation characteristic to withstand high current spikes
- High reliability -Reliability tests comply with AEC-Q200

Applications

- DC/DC converters
- Car Navigation Systems
- Battery powered devices
- Meters/Alarms
- PDA/notebook/desktop devices

Product Identification

THTFA
①

252010
②

D
③

1R0
④

M
⑤

T
⑥

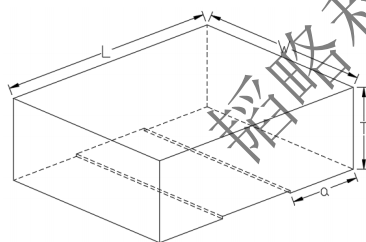
- ① Type : THTFA
- ② External Dimensions (L×W×H) [mm]=252010=2.5*2.0*1.0
- ③ Feature Type:Differential
- ④ Nominal Inductance : 1R0=1.0μH
- ⑤ Inductance Tolerance : K=±10%
M=±20%
N=±30%
- ⑥ Packing T=Tape Carrier Package

Specifications

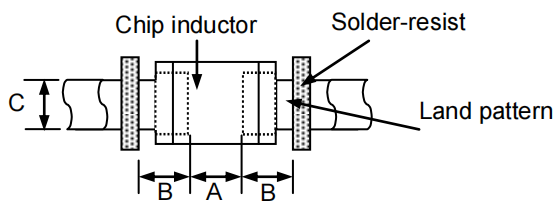
Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz, 1V	Max.	Typ.	Max.	Typ.	Max.	Typ.
Units	uH	mΩ	mΩ	A	A	A	A
Symbol	L	DCR		Isat		I _{rms}	
THTFA252010DR24MT	0.24	14	11.5	8.4	9.4	6.0	7.0
THTFA252010DR33MT	0.33	16	13	7.5	8.5	5.0	5.5
THTFA252010DR47MT	0.47	20	16	6.5	7.0	4.7	5.0
THTFA252010D1R0MT	1.0	30	27	5.0	5.4	4.5	4.7
THTFA252010D1R5MT	1.5	42	37	3.7	4.0	3.6	4.1
THTFA252010D2R2MT	2.2	65	57	3.2	3.5	2.3	2.6
THTFA252010D3R3MT	3.3	110	95	2.6	2.9	1.9	2.2
THTFA252010D4R7MT	4.7	136	124	1.9	2.2	1.6	1.7

- (1) I_{sat} Current: DC current (A) that will cause L₀ to drop approximately 30 %
 (2) I_{rms} : DC current (A) that will cause an approximate ΔT of 40 °C (reference ambient temperature is 25 °C)
 (3) Operating Temperature: -40 °C up to +125 °C
 (4) Rated voltage: 20V

Shape and Dimensions



Recommended Pattern

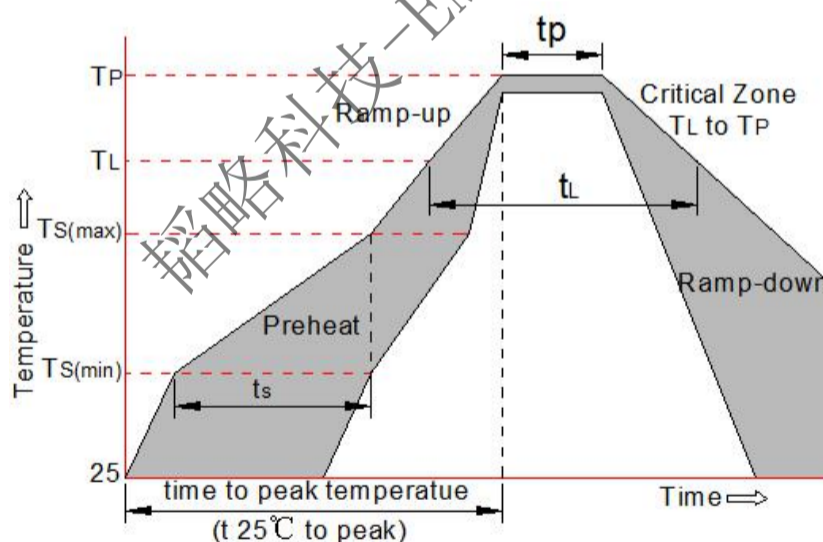


Unit: mm

L	W	T	a	A	B	C
2.5±0.2	2.0±0.2	1.0 Max	0.8±0.2	0.8 Typ	1.0 Typ	2.0 Typ

Soldering Parameters

Reflow Condition		Pb-Free Assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (t_s)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L) (Liquid us)	+217°C
	-Temperature(t_L)	60-90 secs .
Peak Temp (T_p)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C



Contact Information

SHENZHEN TOP-FLIGHT TECHNOLOGY CO.,LTD

4th Floor, C Building, Yuanfen Industrial Park , Bulong Road, Longhua New District, Shenzhen

Tel: 86-755-82908191 Fax: 86-755-82908701 Email:kang@topleve.com

Website: <http://www.topleve.com>