

Wire Wound Power Inductor

THWPI606028 Series

TOP-EMC

FEATURES

- Shielded construction
- Low loss realized with low DCR
- High performance (Isat) realized by metal dust core.
- Ultra low buzz noise, due to composite construction.
- RoHS, Halogen Free and REACH Compliance



APPLICATIONS

- DC/DC converters
- Switches and servers
- LED Lighting
- Battery powered devices.
- Base stations
- PDA/notebook/desktop devices

PRODUCT IDENTIFICATION

THWPI

①

606028

②

D

③

101

④

M

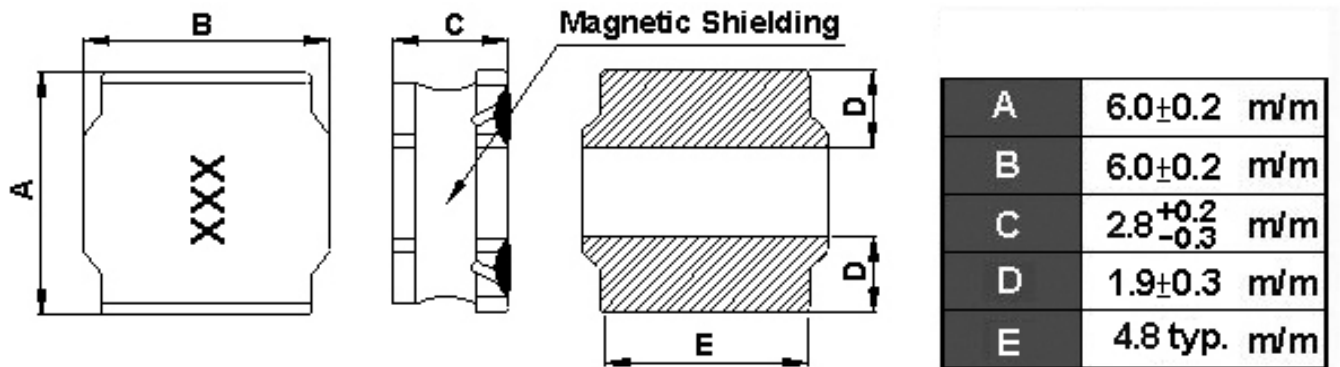
⑤

T

⑥

- ① Type : THWPI
- ② External Dimensions (L×W×H) [mm]= 606028
- ③ Feature Type: Differential
- ④ Nominal Inductance : 101=100μH
- ⑤ Inductance Tolerance :
K=±10%
M=±20%
N=±30%
- ⑥ Packing T=Tape Carrier Package

SHAPE AND DIMENSIONS (Dimensions in mm)



SPECIFICATIONS

Part No.	Inductance	DC Resistance		Saturation Current		Heating Rating Current	
	L0 (μH)	DCR (mΩ)		Isat (A)		Idc (A)	
	±20 %, 100 kHz, 1V	TYP.	MAX	TYP.	MAX	TYP.	MAX
THWPI606028D1R0MT	1	13		7.60		5.20	
THWPI606028D1R5MT	1.5	16		6.30		4.80	
THWPI606028D2R2MT	2.2	20		5.40		4.00	
THWPI606028D2R7MT	2.7	26		4.90		3.70	
THWPI606028D3R3MT	3.3	28		4.30		3.50	
THWPI606028D4R7MT	4.7	38		3.70		3.20	
THWPI606028D6R0MT	6	45		3.30		2.80	
THWPI606028D6R8MT	6.8	50		3.10		2.70	
THWPI606028D100MT	10	65		2.50		2.30	
THWPI606028D150MT	15	95		2.00		1.80	
THWPI606028D220MT	22	135		1.60		1.50	
THWPI606028D330MT	33	220		1.30		1.40	
THWPI606028D470MT	47	320		1.10		1.00	
THWPI606028D680MT	68	420		0.98		0.90	
THWPI606028D101MT	100	600		0.82		0.80	

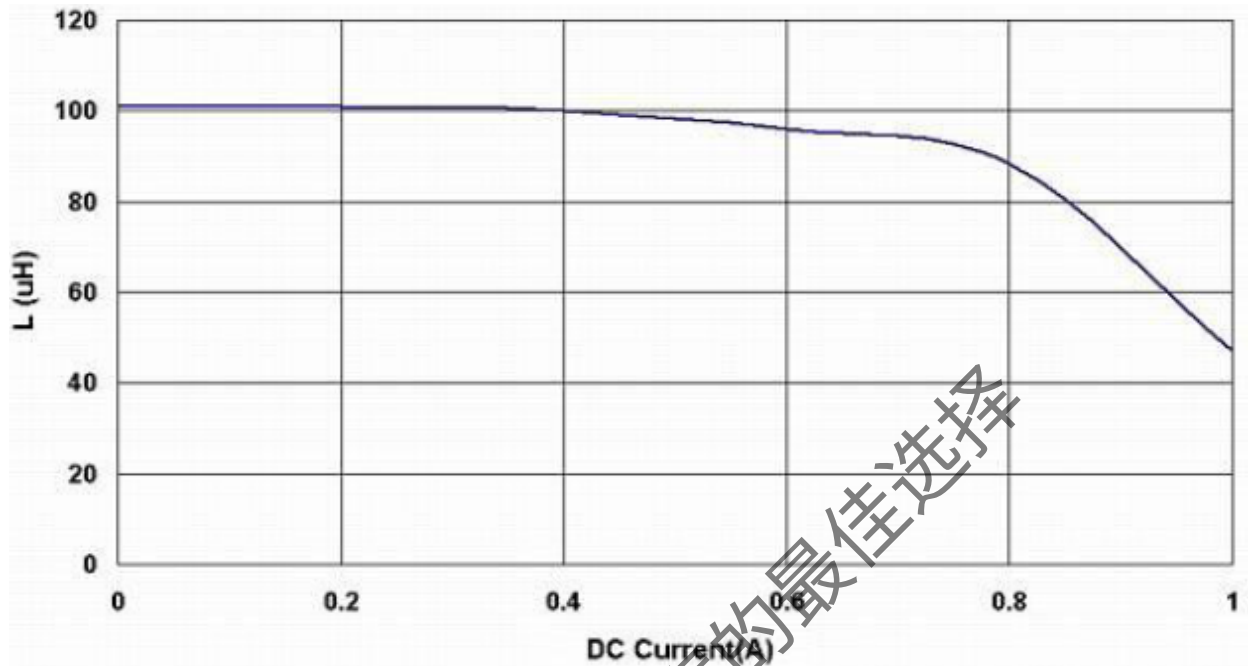
Notes

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 125 °C
3. Idc(A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25°C)
4. Isat(A):DC current (A) that will cause L0 to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions.

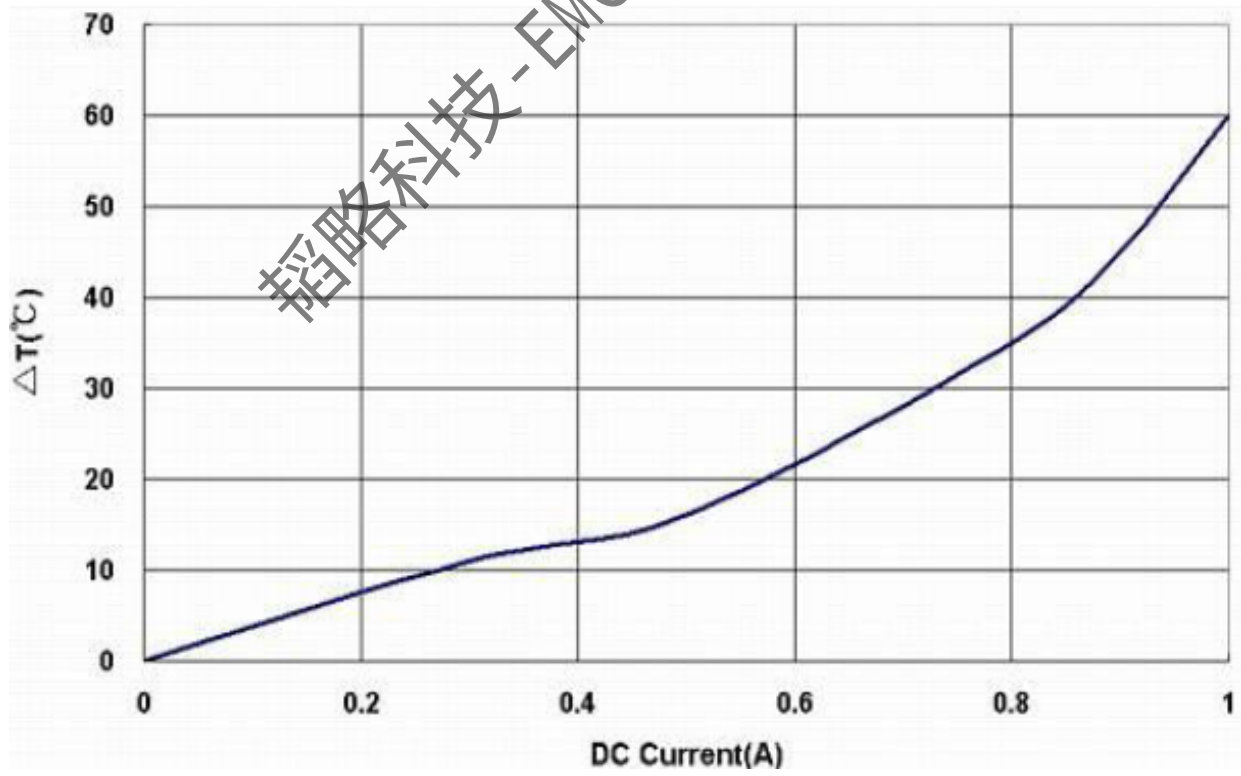
Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

ELECTRICAL

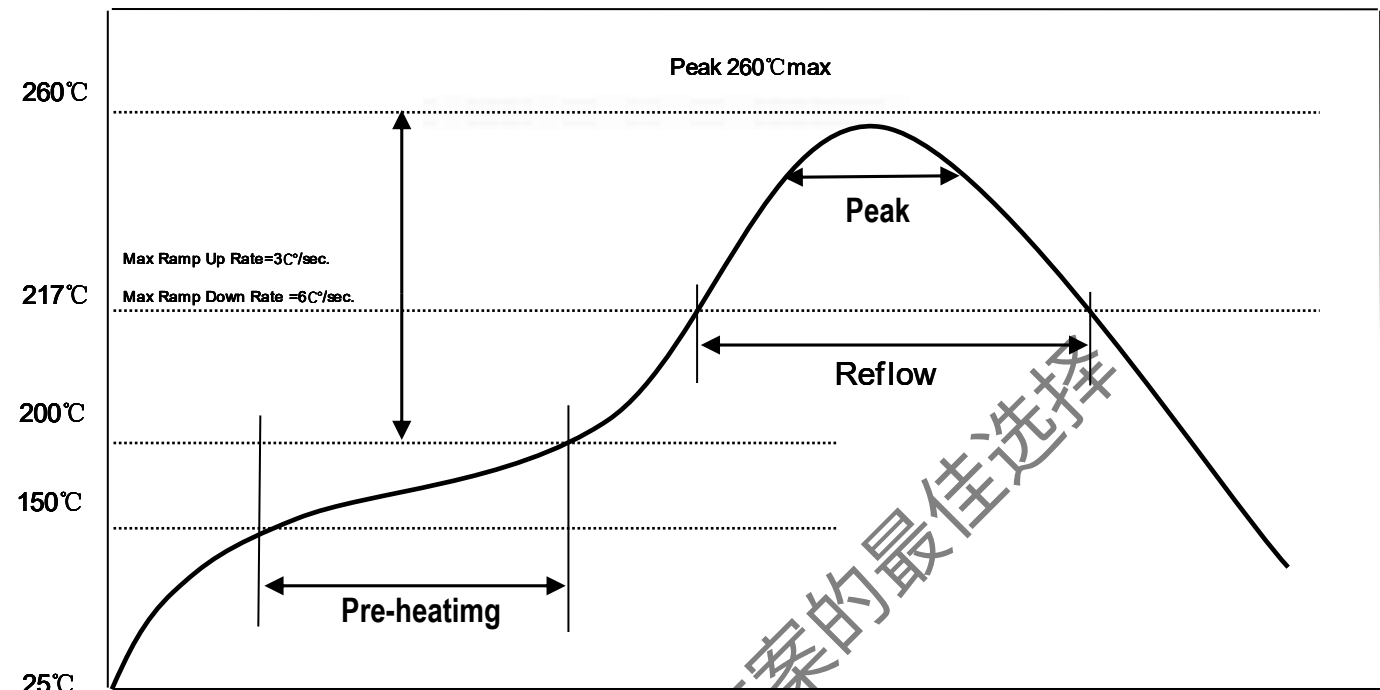
THWPI606028D101MT



THWPI606028D101MT



RECOMMENDED SOLDERING TECHNOLOGIES



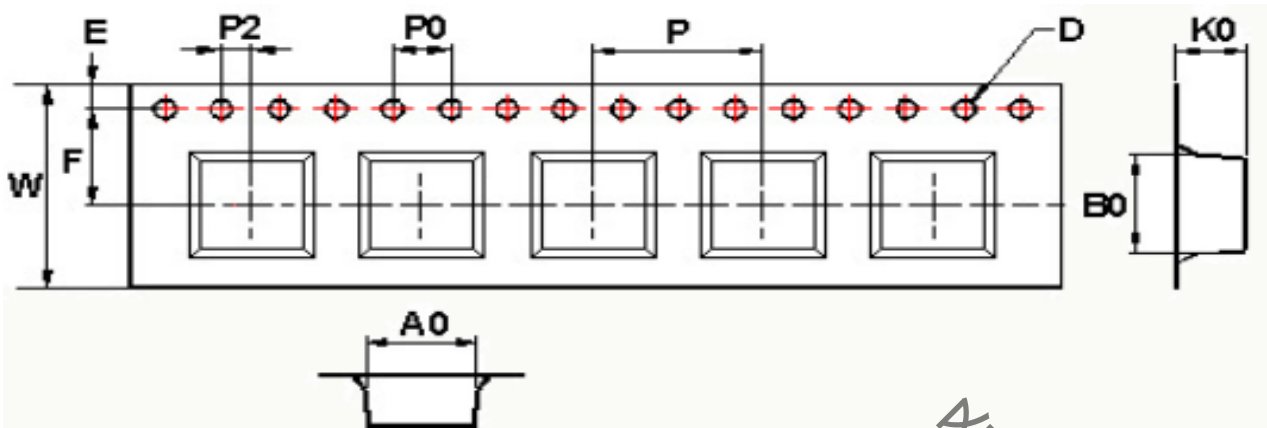
Item.	Ramp - up	Preheating	Reflow	Peak Temp	Cooling
Temp.scope	R.T.~150°C	150°C~200°C	217°C	260±5°C	Peak Temp.~150°C
Time spec	——	60~180sec	60~150sec	20~40sec	——
Time result	——	75~100sec	90~120sec	5~10sec	——

- Note:
- 1.Re-flow possible times:within 2 times
 - 2.Nitrogen adopted is recommended while in re-flow

The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.

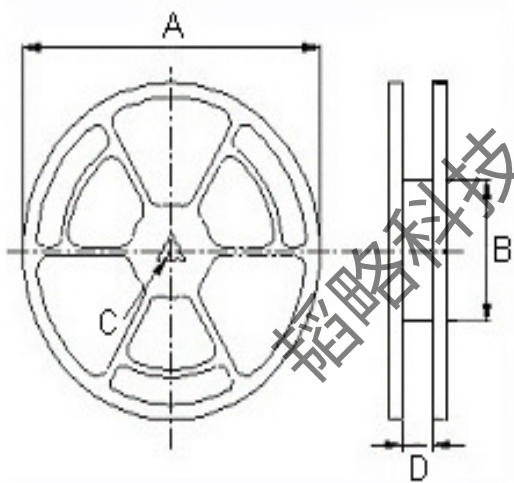
TAPING PACKAGE

Dimension of Tape (Unit: mm)



TYPE	AO	BO	KO	D	E	F	W	P	PO	P2
THWPI606028D101MT	6.25	6.25	3.0	1.55	1.75	7.5	16	12	4	2

Dimension of Reel (Unit: mm)



Reel Dimension : m/m

TYPE	A	B	C	D
THWPI606028D101MT	330	100	13	16

Packaging Quantities:

1500PCS/Reel.

CONTACT INFORMATION

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