

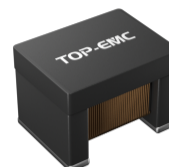
Winding Type Chip Inductor

TLPAI3225 Series

TOP-EMC

Features

- Ferrite core wire wound construction.
- High Reliability due to wire wound type construction.
- Small footprint as well as low profile.
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- High reliability -Reliability tests comply with AEC-Q200



Product Identification

TLPAI
①

3225
②

D
③

470
④

M
⑤

T
⑥

- ① Type : TLPAI
- ② External Dimensions (L×W×H) [mm]= 3.2*2.5*2.3
- ③ Feature Type: Differential
- ④ Nominal Inductance : 470=47 μ H
- ⑤ Inductance Tolerance :
K=±10%
M=±20%
N=±30%
- ⑥ Packing T=Tape Carrier Package

Specifications

Part Number	Ls(uH) (@1 MHz)	DCR (Ω) Max.	SRF (MHz min.)	Rated current(mA)			
				Isat(mA)	Based on temperature rise		
					Ambient temperature 85°C	Ambient temperature 105°C	Ambient temperature 125°C
TLPAI3225D2R2MT	2.2 $\pm$ 20%	0.19	200	1000	1000	880	520
TLPAI3225D4R7MT	4.7 $\pm$ 20%	0.28	100	850	850	720	400
TLPAI3225D100MT	10.0 $\pm$ 20%	0.40	100	500	700	620	360
TLPAI3225D220MT	22.0 $\pm$ 20%	0.62	50	400	550	500	280
TLPAI3225D470MT	47.0 $\pm$ 20%	0.90	30	300	500	300	100

Note: Isat: Applied the current to coils, the inductance change shall be less than 30% of initial value.

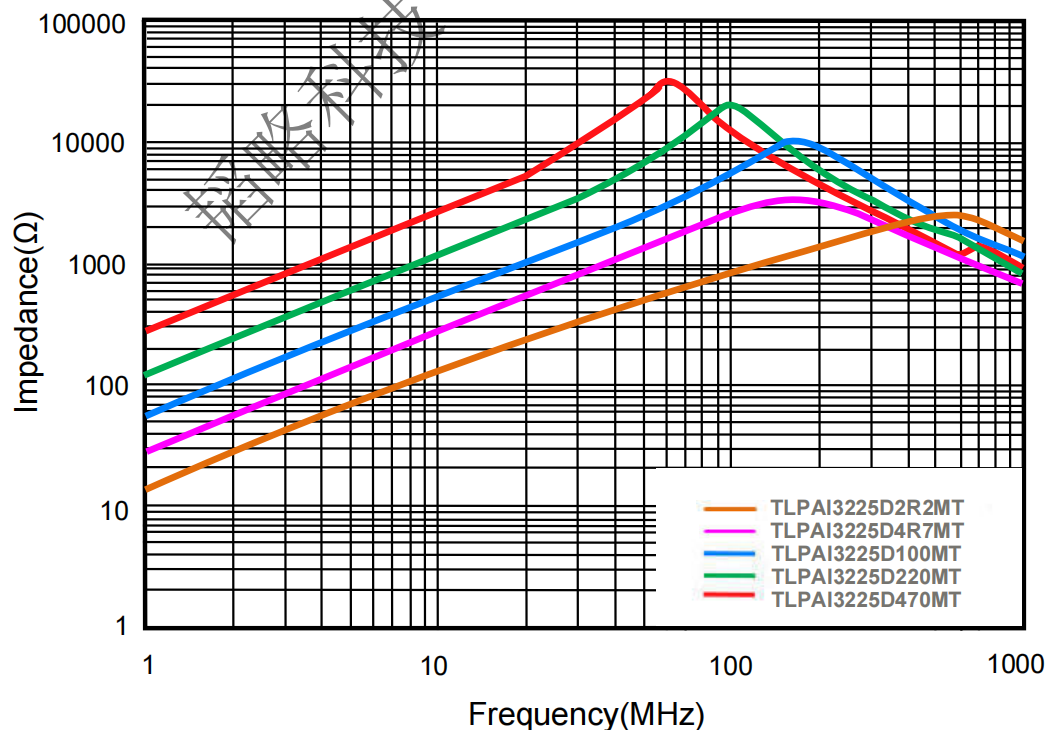
Operating temperature:-40~+125°C (Including self - temperature rise)

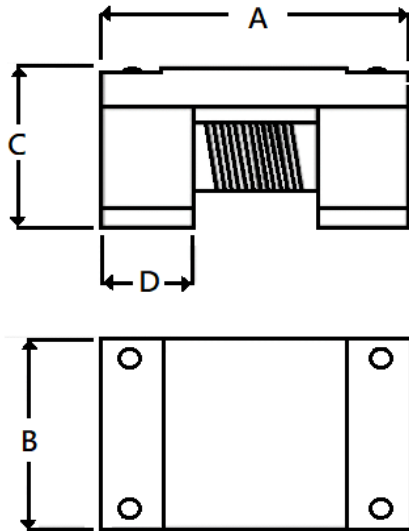
Ambient temperature:

85°C/105°C: the part temperature (ambient temperature plus self-generation of heat) should be under 125°C.

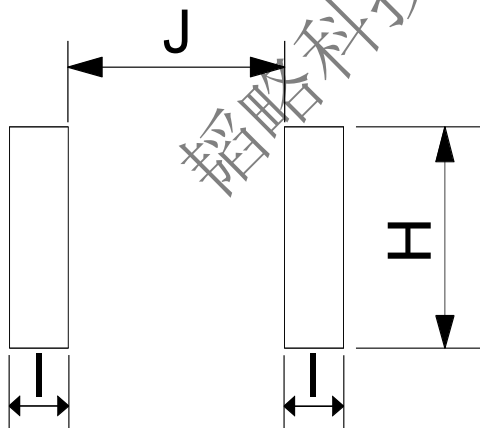
125°C: the part temperature (ambient temperature plus self-generation of heat) should be under 130°C.

Typical Electrical Characteristics



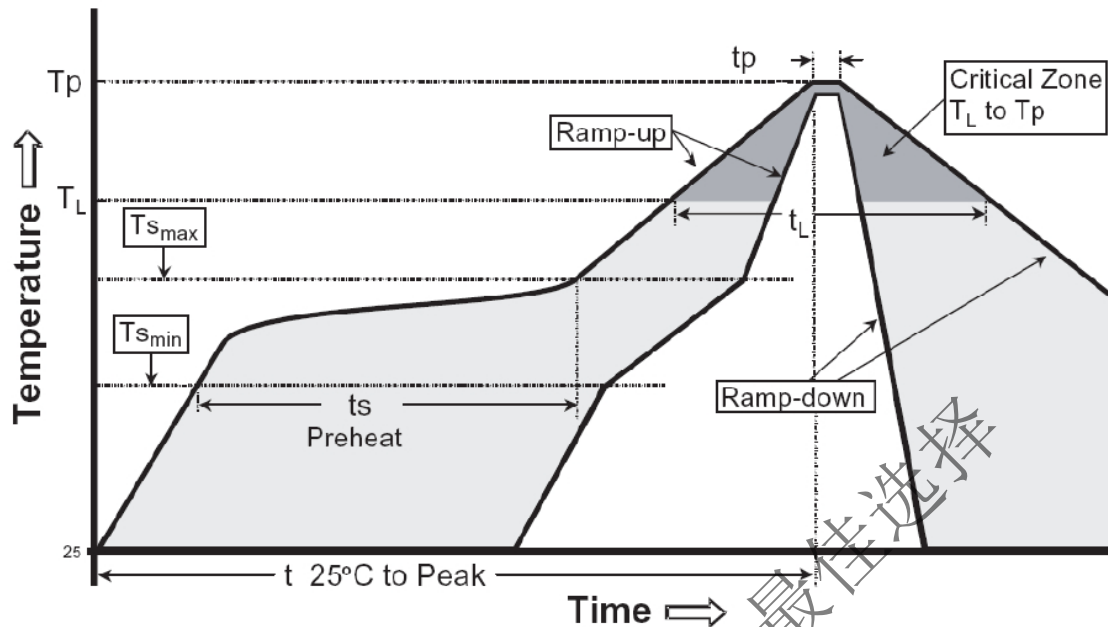
Shape And Dimensions : (Dimensions in mm)

Size	TLPAI3225
A	3.20 ± 0.20
B	2.50 ± 0.20
C	2.30 ± 0.20
D	0.58 ± 0.10

Recommend Land Pattern: (Dimensions in mm)

Size	TLPAI3225
H	2.7 Ref
I	0.9 Ref
J	2.0 Ref

Recommended Soldering Technologies



Profile Feature	Pb free Assembly
Average Ramp Rate (Ts max to Tp)	3 °C/second max
Preheat - Temperature Min (Tsmin) - Temperature Min (Tsmax) - Time (tsmin to tsmin)	150°C 200°C 60-180 seconds
Time maintained above: - Temperature (TL) - Time (tL)	217°C 60-150 seconds
Peak/Classification Temperature (Tp)	260 °C
Peak/Classification Time (Tp)	3-4 seconds
Time within 5 °C of actual Peak Temperature (Tp)	20-40 seconds
Ramp-Down Rate	6 °C/second max.
Time 25°C to Peak Temperature	8 minutes max

CONTACT INFORMATION

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