

Wire Wound Chip Ferrite Inductor

THWSI1608 Series

TOP-EMC

Features

- Large inductance with ferrite material
- High Reliability due to wire wound type construction.
- Small chip suitable for surface mounting.
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- High reliability -Reliability tests comply with AEC-Q200

Product Identification

THWSI
①

1608
②

D
③

R27
④

K
⑤

T
⑥

- ① Type : THWSI
- ② External Dimensions (L×W×H) [mm]= 1.6*0.8*0.8
- ③ Feature Type : Differential
- ④ Nominal Inductance : R27=270 nH
- ⑤ Inductance Tolerance : J=±5%
K=±10%
- ⑥ Packing T=Tape Carrier Package

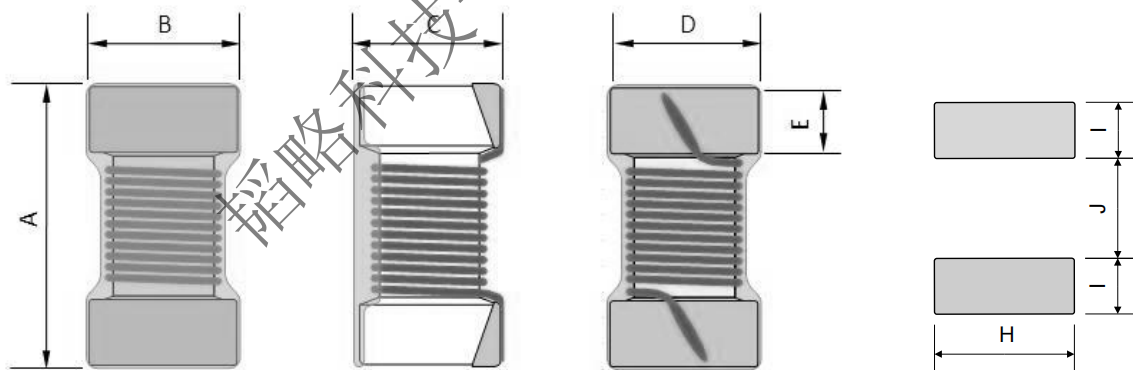
Specifications

Part Number	Inductance	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency	L Test Freq.
Units	nH	Ω	mA	MHz	MHz
Symbol	L	DCR	I _r	S.R.F	Freq.
THWSI1608D4N9KT	4.9 ± 10%	0.015	2600	2300	10
THWSI1608D15NKT	15 ± 10%	0.025	2200	2000	10
THWSI1608D33NKT	33 ± 10%	0.035	1700	1800	10
THWSI1608D85NKT	85 ± 10%	0.060	1400	1380	10
THWSI1608DR10KT	100 ± 10%	0.100	1000	1260	10
THWSI1608DR12KT	120 ± 10%	0.085	1100	1200	10
THWSI1608DR27KT	270 ± 10%	0.160	750	660	10
THWSI1608DR33KT	330 ± 10%	0.250	630	600	10
THWSI1608DR47KT	470 ± 10%	0.450	500	555	10
THWSI1608DR65KT	650 ± 10%	0.520	430	510	10

Note:

Operating temperature: -40~+125°C

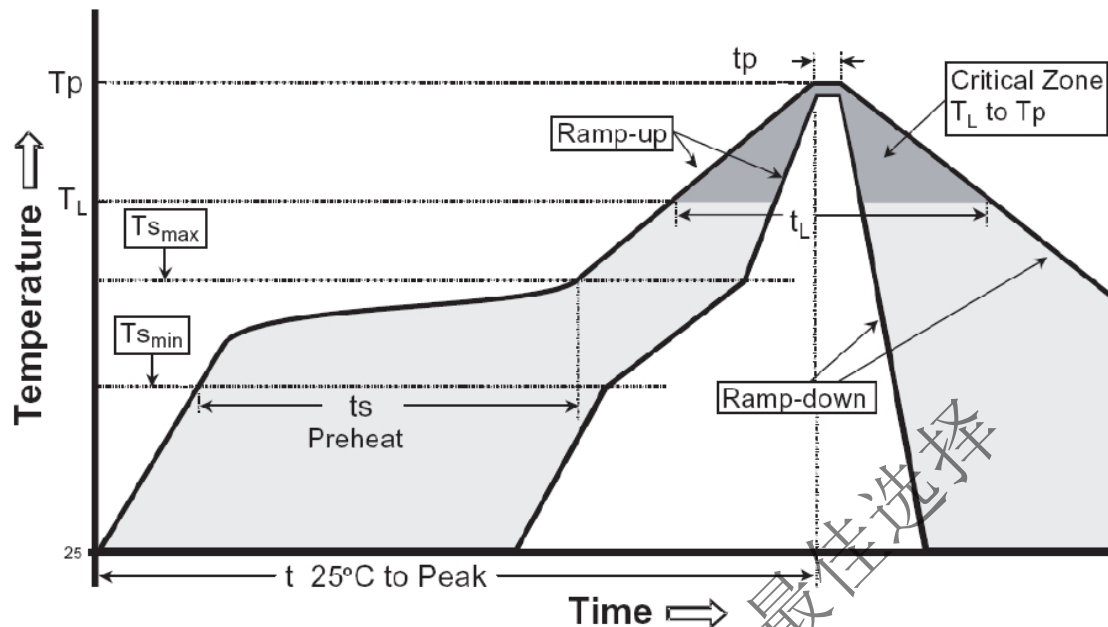
Shape And Dimensions: (Dimensions in mm)



Series	A.	B	C	D Typ.	E Ref.	H Ref.	I Ref.	J Ref.
THWSI1608 Series	1.60 ± 0.20	0.80 ± 0.20	0.80 ± 0.20	0.80	0.30	1.02	0.64	0.64

Unit: mm

Recommended Soldering Technologies



Profile Feature	Pb free Assembly
Average Ramp Rate (T_s max to T_p)	3 °C/second max
Preheat - Temperature Min ($T_{s_{min}}$) - Temperature Min ($T_{s_{max}}$) - Time ($t_{s_{min}}$ to $t_{s_{min}}$)	150°C 200°C 60-180 seconds
Time maintained above: - Temperature (T_L) - Time (t_L)	217°C 60-150 seconds
Peak/Classification Temperature (T_p)	260 °C
Peak/Classification Time (T_p)	3-4 seconds
Time within 5 °C of actual Peak Temperature (T_p)	20-40 seconds
Ramp-Down Rate	6 °C/second max.
Time 25°C to Peak Temperature	8 minutes max

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>