

■ Features

- Lowest core losses.
- High saturation current.
- Extremely low DCR.
- Magnetically shielded..
- Various package size and wide inductance range.
- Operating temperature:-40℃ to +125℃ (Including self-temperature rise)

■ Applications

- VRM for consumer or commercial application.
- LCD TVs,monitors and panels.
- Game consoles.
- DC/DC converters.
- Power PC.

■ Product Identification

YLSI □□□□□□ - □□□ □
 (1) (2) (3) (4)

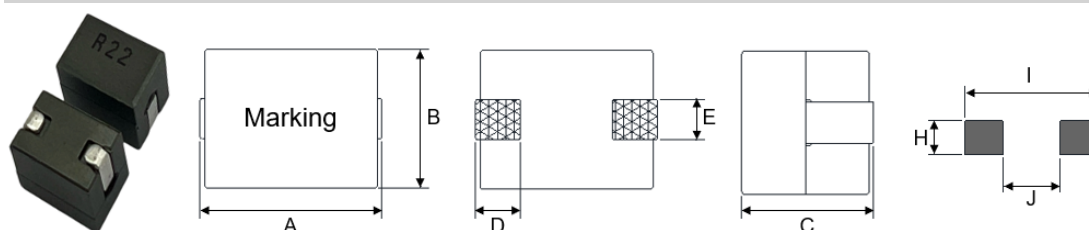
(1) : Type

(2) : Dimensions

(3) : Inductance Value

(4) : Inductance Tolerance; M=±20%,K=±10%

■ Shapes and Dimensions (Unit: mm)



TYPE	A Max.	B Max.	C Max.	D Typ.	E Typ.	H Ref..	I Ref.	J Ref.
YLSI100808	10.8	8.0	8.0	2.5	2.3	2.8	11.3	4.6

■ Circuit Diagram



■ DCR Test Point



▲ Points used for measuring DCR

■ Electrical Characteristic

Part Number	Inductance (uH)	Test Freq.	DCR Max. (mΩ)	IDC1 Max.(A)	IDC2 Max.(A)	Mark
YLSI100808-R10□	0.10	100KHz/0.1V	0.18±5%	100	70	R10
YLSI100808-R12□	0.12	100KHz/0.1V	0.18±5%	90	70	R12
YLSI100808-R15□	0.15	100KHz/0.1V	0.18±5%	80	70	R15
YLSI100808-R18□	0.18	100KHz/0.1V	0.18±5%	67	70	R18
YLSI100808-R22□	0.22	100KHz/0.1V	0.18±5%	48	70	R22
YLSI100808-R27□	0.27	100KHz/0.1V	0.18±5%	40	70	R27
YLSI100808-R30□	0.30	100KHz/0.1V	0.18±5%	32	70	R30

※ IDC1: Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C※ IDC2: Based on temperature rise (ΔT : 40 °C TYP.)

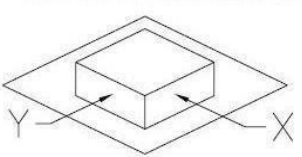
※ Rated DC Current : The less value which is IDC1 or IDC2 .

※ Storage temp.: -20°C up to +40°C, 75% RH max.

■ Material List

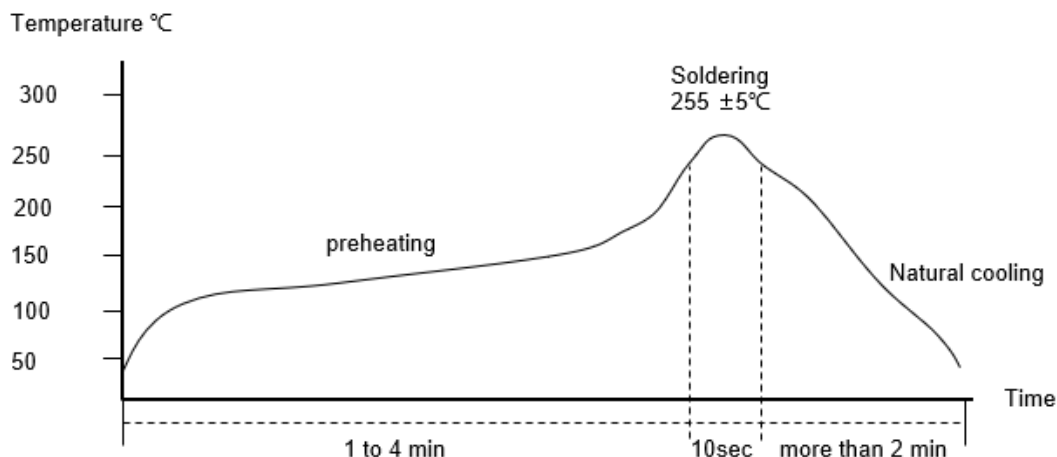
NO.	ITEM	DESCRIPTION
1	CORE	FERRITE
2	CLIP	C1100P2
3	WIRE	P180 G1
4	ADHESIVE	5890LC
5	INK	BLACK

■ Reliability Testing

Operating Temperature	- 40 to + 125 °C (Contain Heating coil)
Appearance Inspection	No external defects by visual inspection
Terminal Strength 	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right)
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 100 MΩ at 50V D.C . between wire and core .
Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core .
Temperature characteristics	Inductance coefficient (0~2,000) × 10 / °C (- 40 ~ + 125 °C)
Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition .
A test is made under the above mentioned condition , and it is kept for 2 hours in the normal	

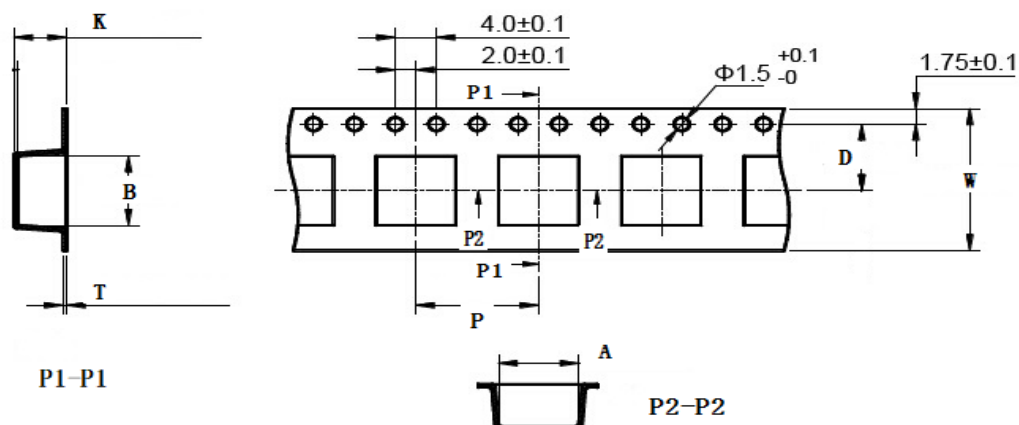
■ Recommended soldering temp.Graph

IR Reflow profile



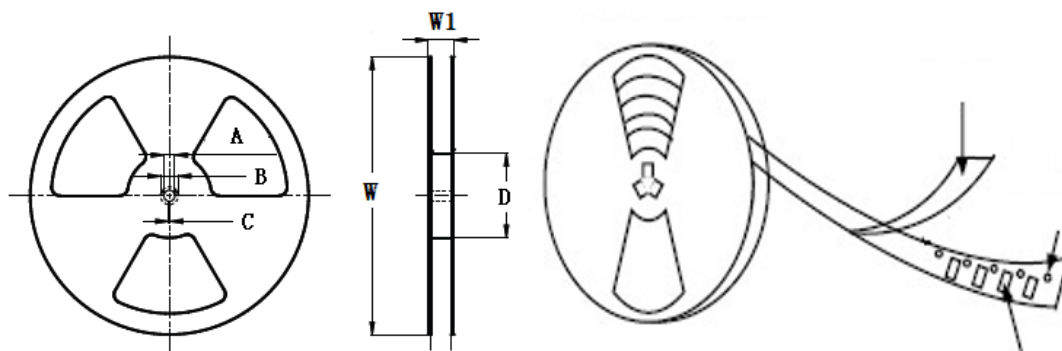
Temperature and humidity . After that , no mechanical and electrical defect should be found .

Taping Dimensions(Unit:mm)



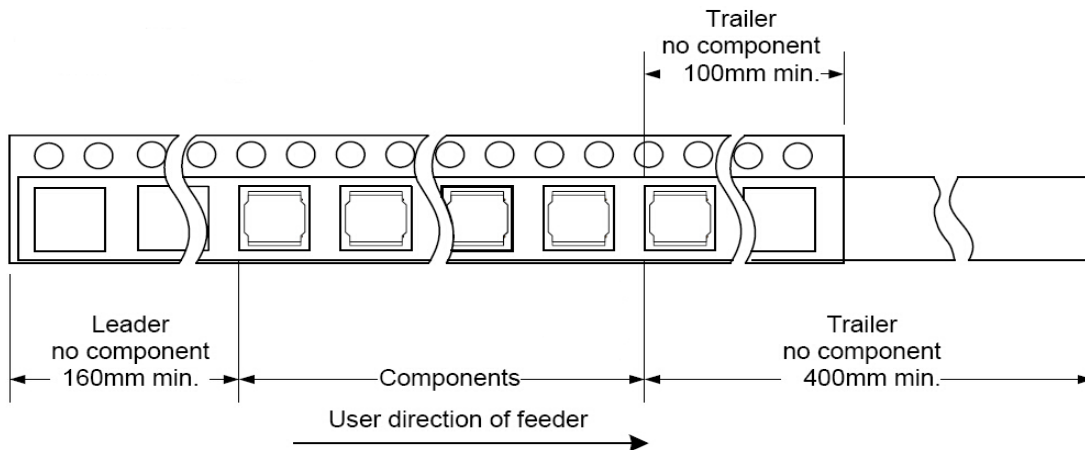
TYPE	W	A	B	D	P	K	T	MPQ
YLSI100808	24.0±0.3	10.2±0.1	8.2±0.1	11.5±0.1	12.0±0.1	8.2±0.1	0.40±0.05	400

Reel Dimensions(Unit:mm)

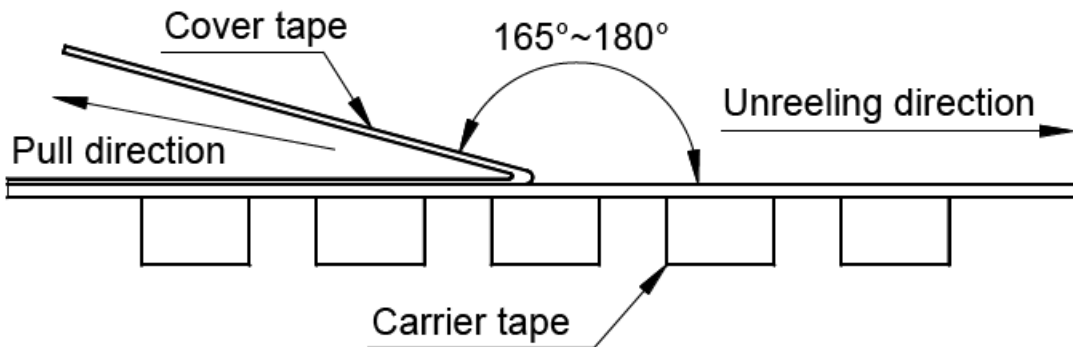


TYPE	W	W1	A	B	C	D
YLSI100808	330±2.0	24.4±1.5	13.0±0.50	21.0±0.80	2.0±0.50	100

■ Direction of rolling



■ Cover tape peel off condition



Cover tape peel force shall be 0.1N to 1.3N.

Reference peel speed $300 \pm 10 \text{ mm/min}$.