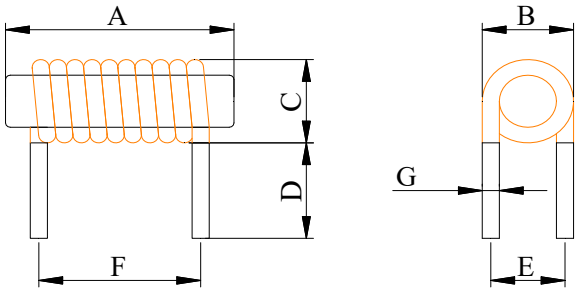
Features

* Ferrite Cores with high operating frequency, low DC resistance and high saturation current.
* Lead-free products compliant with RoHS Directive.
* Operating temperature range: -40°C to +125°C (including heat generated by windings).

Applications

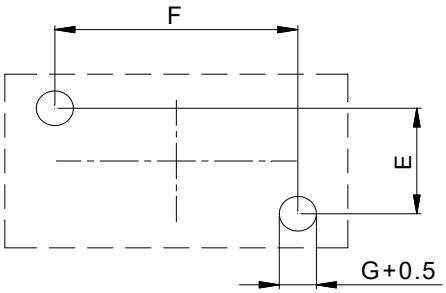
* Switching power supply, power amplifier
* Output antenna, filter, displayer,UPS

Appearance and Dimensions



Dimensions(mm)							
Series	A	B	C	D	E	F	G
LYR-1030H-8R2M-C160	30.0±1.0	14.5max.	14.5max.	5.50±0.5	12.0±0.50	25.5±1.0	1.60±0.15
LYR-1030H-100M-C106	30.0±1.0	14.0max.	14.0max.	5.50±0.5	11.7±0.50	22.5±1.0	1.30±0.15
LYR-1030H-150M-C76	30.0±1.0	13.5max.	13.5max.	5.50±0.5	11.5±0.50	24.0±1.0	1.10±0.15
LYR-1030H-220M-C63	30.0±1.0	13.5max.	13.5max.	5.50±0.5	11.4±0.50	28.0±1.0	1.00±0.15

Land Pattern Dimensions



Circuit Diagram

Product Identification

LYR - 1030H - 220 M-C63
① ② ③ ④ ⑤

① Product Symbol
② Dimensions
③ Inductance Value (220:22.0μH)
④ Inductance Tolerance (M:20%)
⑤ Internal Code

Electrical Characteristics

Part No.	Inductance @1KHz/0.25V	Tolerance	DC Resistance max.	DC Resistance typ.	Saturation Current typ.	Heat Rating Current typ.
Unit	μH	%	mΩ		A	A
Symbol	L	Tol.	R_{DC}		I_{SAT}	I_{RMS}
LYR-1030H-8R2M-C160	8.20	±20	6.43	4.95	31.0	21.6
LYR-1030H-100M-C106	10.0	±20	10.2	7.83	28.0	17.2
LYR-1030H-150M-C76	15.0	±20	17.8	13.7	23.5	13.0
LYR-1030H-220M-C63	22.0	±20	26.4	20.3	19.5	10.7

Remark:

※1:All test data is referenced to 20°C ambient.

※2:R_{DC}:DC resistance at 20°C.

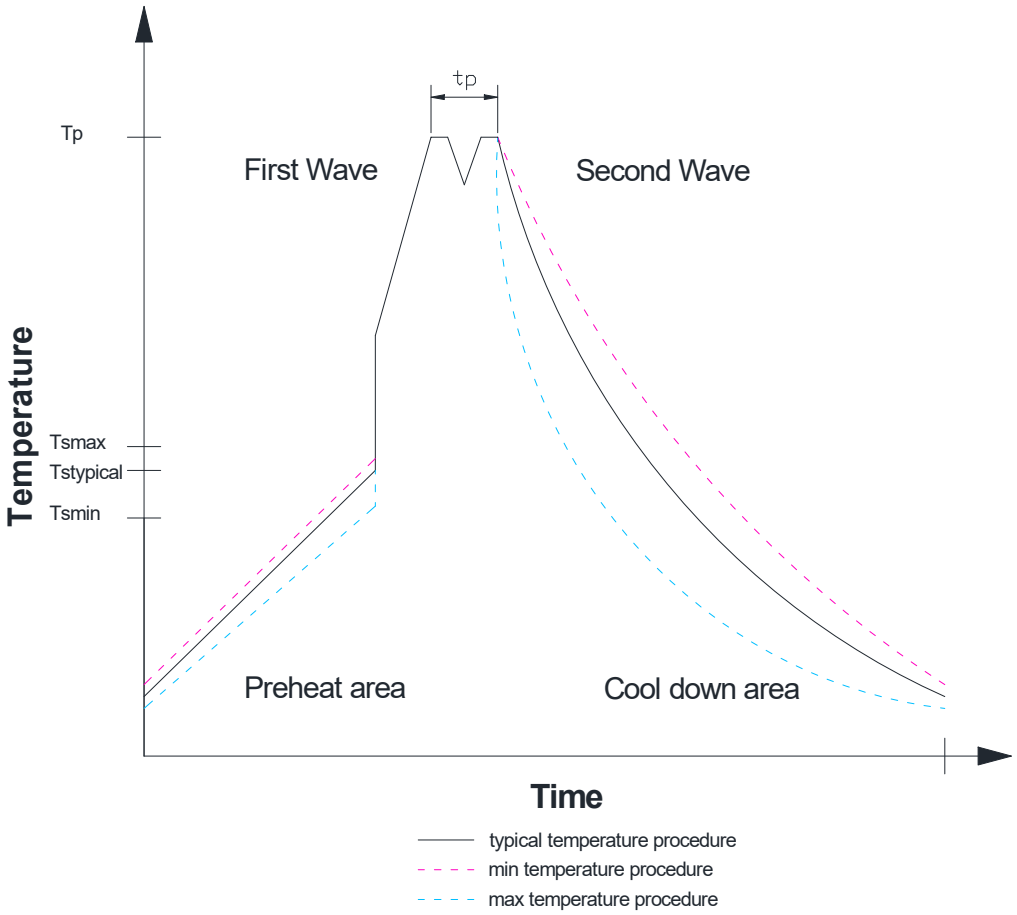
※3:Saturation Current: typ. Value, DC current at which the inductance drops 20% from its value without current.

※4:Heat Rating Current: DC current that causes the temperature rise (△T) from 20°C ambient, for typ. Value, △T is approximate 40°C.

※5:Specifications subject to change without notice. Please check our website for latest information.

Recommended Soldering Conditions

Classification Wave Soldering Profile:



Profile Feature		Lead-Free Assembly
Preheat Temperature Min	$T_{s\ min}$	100 °C
Preheat Temperature Typical	$T_{s\ typical}$	120 °C
Preheat Temperature Max	$T_{s\ max}$	130 °C
Preheat Time t_s from Ts min to $T_{s\ max}$	t_s	70 seconds
Ramp-up Rate	ΔT	150 °C max.
Peak Temperature	T_p	250 °C - 260 °C
Time of actual peak temperature	t_p	max. 10 seconds max. 5 seconds each wave
Ramp-down Rate, Min		~ 2 K/ second
Ramp-down Rate, Typical		~ 3.5 K/ second
Ramp-down Rate, Max		~ 5K/ second
Time 25 °C to 25 °C		4 minutes

Refer to EN61760-1:2006

Products Storage

(1) Storage period

Products which inspected in LYEC over 12 months ago should be examined and used, which can be confirmed with inspection No. marked on the container. Solderability should be checked if this period is exceeded.

(2) Storage conditions

Products should be storage in the warehouse on the following conditions:

Temperature: Less than 40℃

Humidity : Less than 75% relative and humidity

No rapid change on temperature and humidity

(3) Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidization of electrode, resulting in poor solderability.

(4) Products should be storage on the palette for the prevention of the influence from humidity, dust and so on.

(5) Products should be storage in the warehouse without heat shock, vibration, direct sunlight and so on.

(6) Products should be storage under the airtight packaged condition.