

Choke Coil for LPF

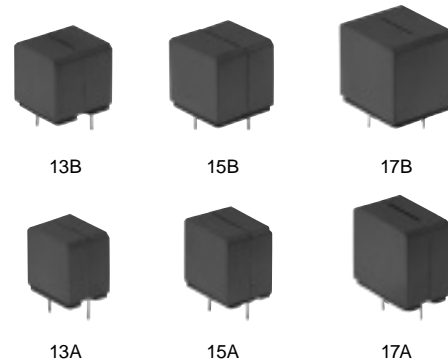
Singapore

Series: **Single**

Type : **13A, 13B, 15A, 15B, 17A, 17B**

For LPF of multichannel digital amplifiers, with a small mounting area (Small size, low R_{DC} , high power)

Industrial Property : Patents 1 (pending)



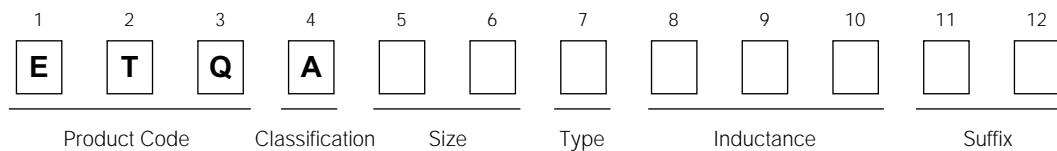
■ Features

- Low leakage flux
- Low loss with low R_{DC} and low core loss.
- High quality sound, low distortion
- RoHS Compliant

■ Recommended Applications

- Home theater digital amplifiers, AV-Receivers, Audio/Visual equipment
- DC-DC converters

■ Explanation of Part Numbers



■ Standard Parts ETQA□□A Type

Parts No.	Inductance (μH)	Tolerance (%)	Saturation current at 100 °C (A)	Heat current ΔT=40 °C (A)	R_{DC} max. at 20 °C
ETQA13A7R0	7.0	15	11.0	7.0	9.0 mΩ
ETQA13A100	10.0	15	8.0	6.0	
ETQA13A150	15.0	15	5.0	5.0	
ETQA15A7R0	7.0	15	16.0	11.0	10.0 mΩ
ETQA15A100	10.0	15	12.0	10.0	
ETQA15A150	15.0	15	8.0	8.0	
ETQA17A7R0	7.0	15	22.0	12.0	12.0 mΩ
ETQA17A100	10.0	15	16.0	11.0	
ETQA17A150	15.0	15	10.0	9.0	

(Note1) Inductance is measured at 10 kHz

(Note2) Saturation current is the current value when inductance decreases to 80 % of its initial value

(Note3) Heat current is the actual value of the current when the temperature rise of coil increases 40 °C.

Please note that the ambient temperature within the product will have an effect on how quickly the coil temperature increases by 40 °C.

NEW

■ Standard Parts ETQA□□B Type

Parts No.	Inductance (μH)	Tolerance (%)	Saturation current at 100 °C (A)	Heat current ΔT=40 °C (A)	R _{DC} max. at 20 °C
ETQA13B150	15.0	10	7.0	7.0	13.0 mΩ
ETQA13B220	22.0	10	5.5	5.5	
ETQA13B330	33.0	10	3.0	3.0	
ETQA15B150	15.0	10	12.0	8.0	15.0 mΩ
ETQA15B220	22.0	10	8.0	7.0	
ETQA15B330	33.0	10	4.0	4.0	
ETQA17B100	10.0	10	21.0	11.0	17.0 mΩ
ETQA17B150	15.0	10	15.0	10.0	
ETQA17B220	22.0	10	11.0	8.0	
ETQA17B330	33.0	10	7.0	6.0	

(Note1) Inductance is measured at 10 kHz

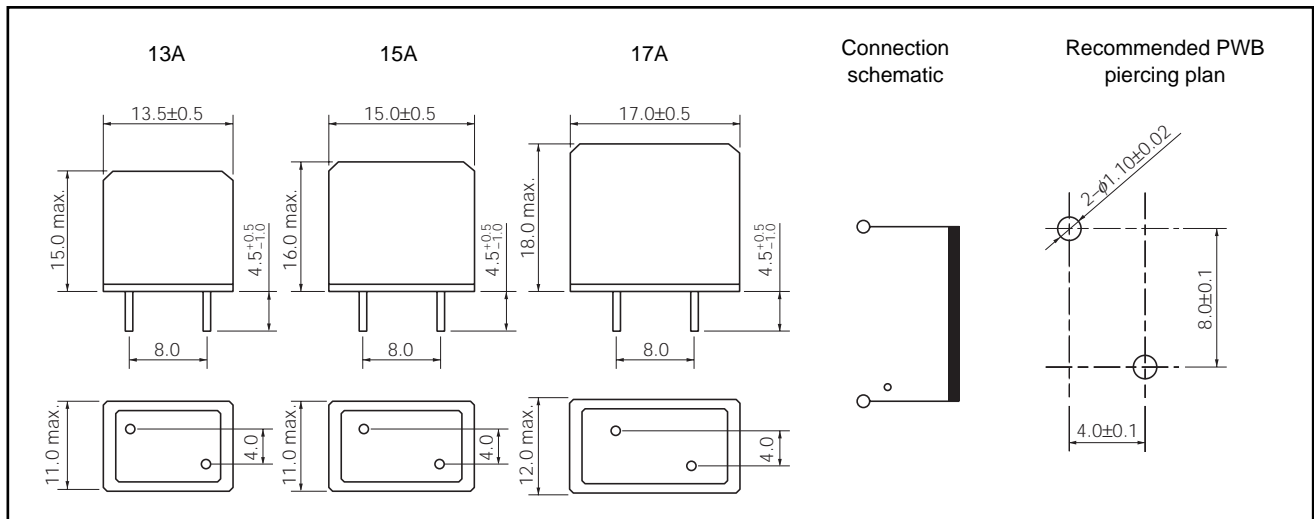
(Note2) Saturation current is the current value when inductance decreases to 80 % of its initial value

(Note3) Heat current is the actual value of the current when the temperature rise of coil increases 40 °C.

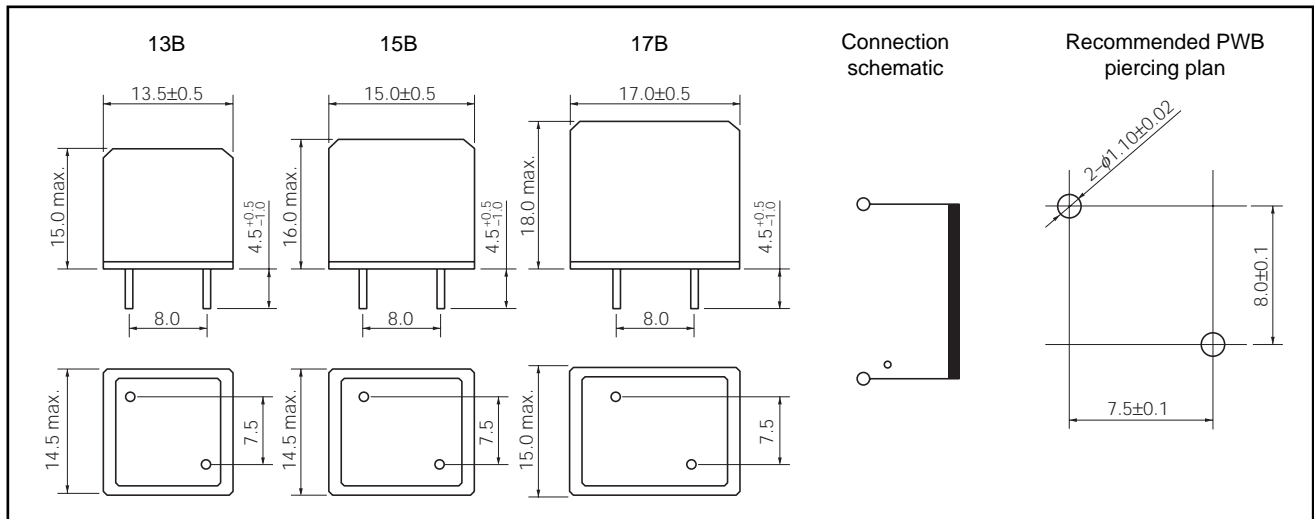
Please note that the ambient temperature within the product will have an effect on how quickly the coil temperature increases by 40 °C.

■ Dimensions in mm (not to scale)

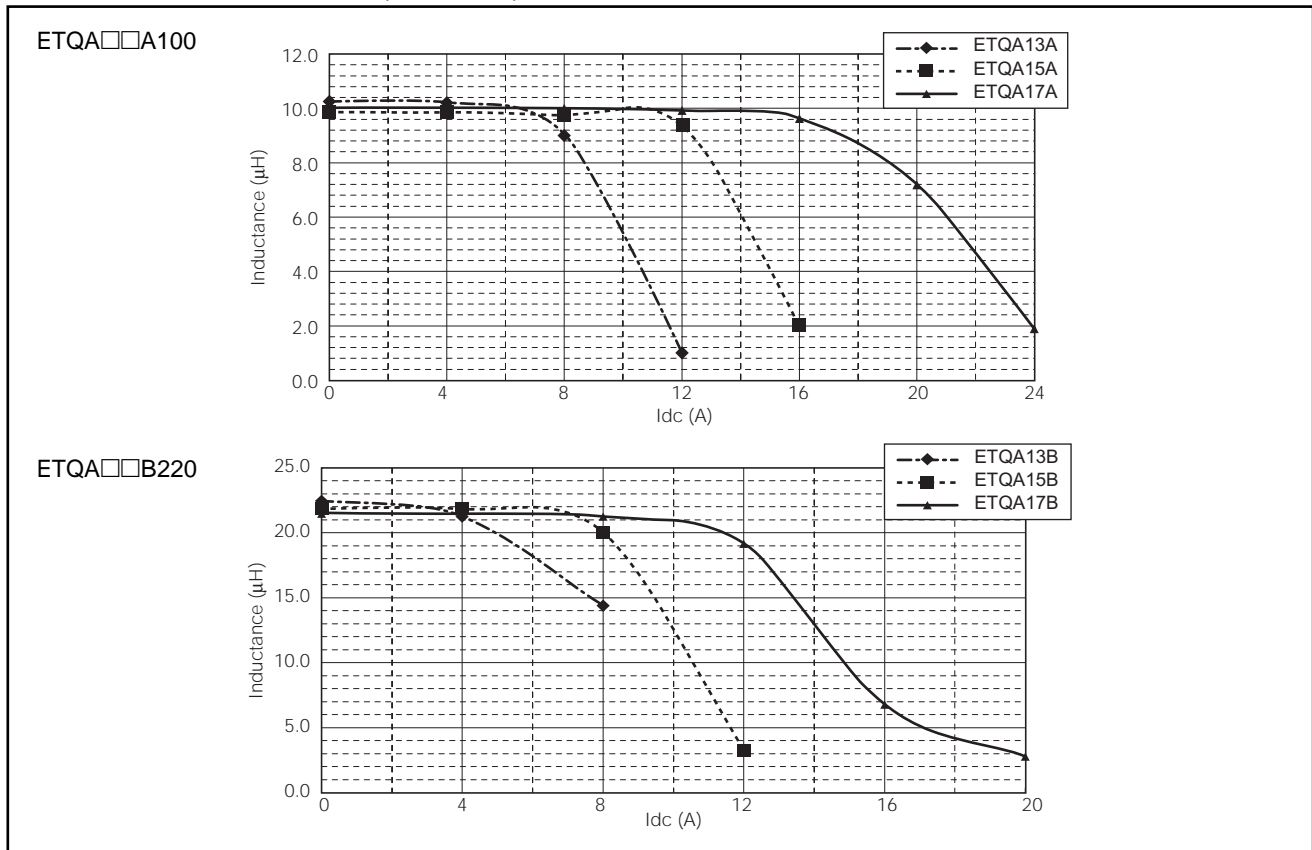
● ETQA□□A Type



● ETQA□□B Type



■ Performance Characteristics (Reference)



⚠ Cautions for use

For upgraded reliability and safety, consider following precautionary items.

1. Saturation current

The rated current is defined as the smaller value of either the current value when the inductance drops 10 % from its initial point.

Do not operate these coils beyond the specified rated current.

2. Heat current

The measurement current value is the actual value of the current at which the temperature of the coil becomes 40 °C while DC current flows. Take the temperature rise during operation into consideration.

3. Mounting

- ① The core may be damaged when excessive force or shock are applied.
Do not use products that have been dropped.
- ② Do not allow the coil to make contact with other parts and take the interaction between them, magnetic interference and electrostatic into consideration.
- ③ Do not bend the terminals during mounting.
The terminals must connect correctly.
Do not apply any force to them.
- ④ The float on PWB must not occur after mounting.

4. Soldering

- ① Do not press on the terminals from above with a soldering iron.
- ② Use flux so the copper wire does not decay.
(Use only the correct amounts of chloride, pH and other types of solvents)
- ③ When using a soldering iron, only repeat the soldering process at intervals of 3 seconds minimum.
- ④ When using the dipping method for soldering, cool the back of PWB for 30 seconds after dipping.

5. Storage

- ① Avoid high temperatures, moisture, gases and magnetic fields.
- ② After storage for more than 1 year, only use the products after inspecting their outer structure.
(Pay attention to possible oxidation of the core and inferiority of lead wire solderability)