

TLVR Series

Molding Power Inductors

Size 080506



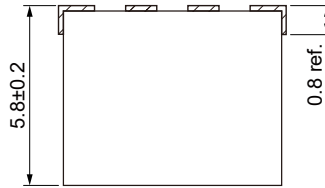
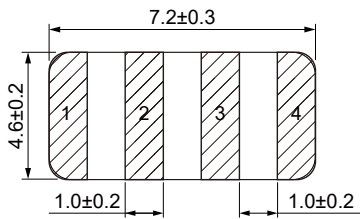
FEATURES

- Compliant for 100% Lead(Pb)-Free and RoHS.
- Higher current carrying Capacity, lower DCR, and more efficiency.
- Operating temperature: -55 to +125 °C(Including self - temperature rise).
- Quantity: 600PCS

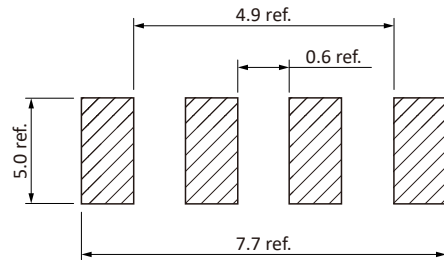
APPLICATION

- AI Servers, Data Centers, GPU/AI Accelerators.
- Desktop Motherboards, CPU/GPU Power Delivery.
- Multi-phase VRM, High-current DC-DC Converters.
- Networking Equipment, Communication Infrastructure.

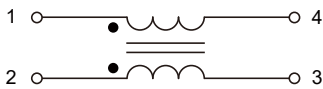
Dimensions: [mm]



Land Pattern: [mm]



Schematic:



Electrical Properties:

Part No	Inductance @ 100KHz/1V (nH)	FLL 1-4 Min. (nH)	DC Resistance 1-4 (mΩ)	DC Resistance 2-3 (mΩ)	Temperature Rise Current 1-4 Max. (A)	Saturation Current 1-4 Typ. (A)	Hi-Pot Min. (V)	Kps Typ.
TLVR080506-85NM-02	85±20%	47	0.175±20%	0.55±20%	62	90	100	0.9

All test data is referenced to 25 °C ambient.

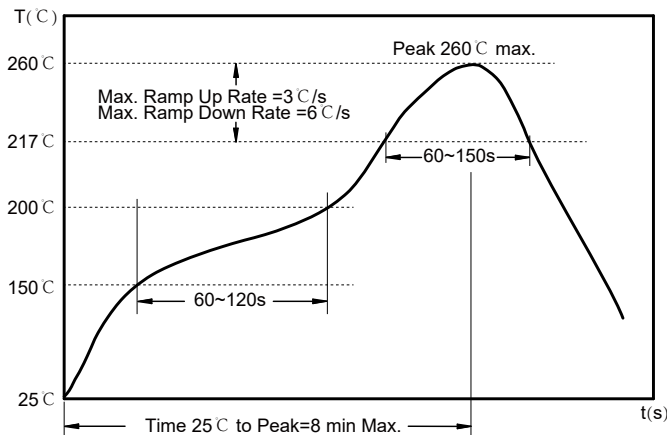
Saturation Current will cause L0 to drop approximately 30%.

Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40$ °C.

FLL: tested @100 kHz, 1.0 Vrms, Isat, applied for +25 °C.

Hi-Pot: as pass / fail judgement, tested @ 2s,2mA, between 2 windings.

Soldering Reflow:



Preheat condition: 150 ~200 °C/ 60~120 sec.

Allowed time above 217 °C: 60~150 sec.

Max temperature: 260 °C.

Time within 5 °C of actual Peak Temperature: 30 max. sec.

Product Marking:

Marking	Printing (Inductance)
---------	-----------------------

Cautions and Warnings:

Storage Conditions:

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate. The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does. As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.