

FC-ALX 5050D-150MT SMD Flat Wire High Current Inductor

Applications

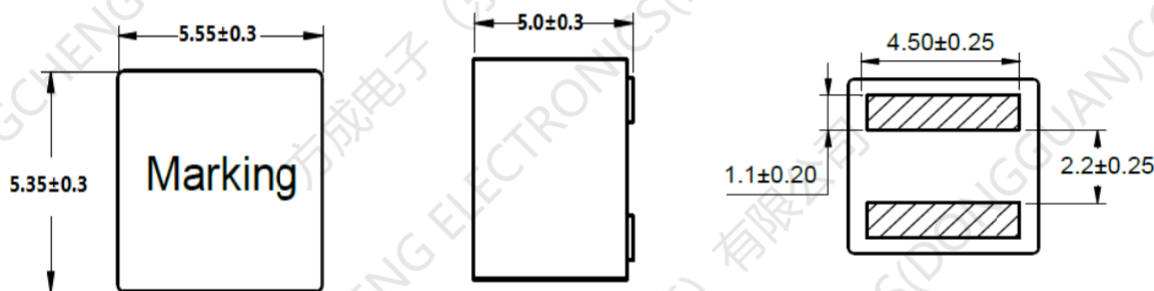
- Industrial computers
- High current switching regulators
- Boost, Buck, Circuit Inductance
- Filter
- Magnetically shielded
- Flat wire coil for low losses at high frequency
- Low stray field

Operating temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
(including coil's self temperature rise)

Storage temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$



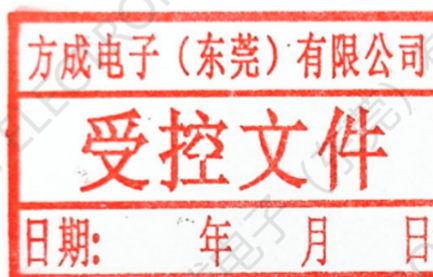
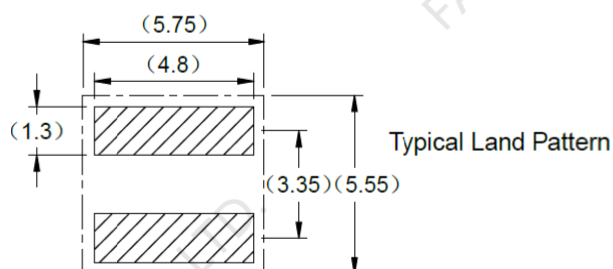
1. Dimensions: [mm]



2.Schematic:



3. Recommended Land Pattern: mm



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4. ELECTRIC CHARACTERISTICS

Part number	L(μ H) $\pm 20\%$	DRC (mohms)		SRF MHZ	Isat-A drops 30%	Irms -A
		typ	max			
FC-ALX 5050D-150MT	15.0	39.0	45.0	10.0	6.0typ/6.5MAX	5.0MAX/5.5MAX

Remark:

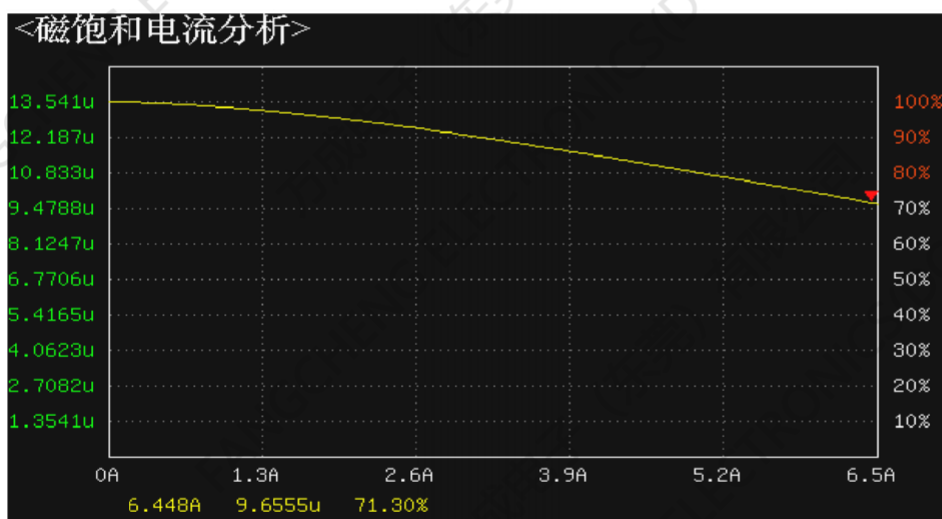
<1>Inductance: 100KHz 0.25V condition: Ta= 25°C

<2>Tolerance of inductance: $\pm 20\%$

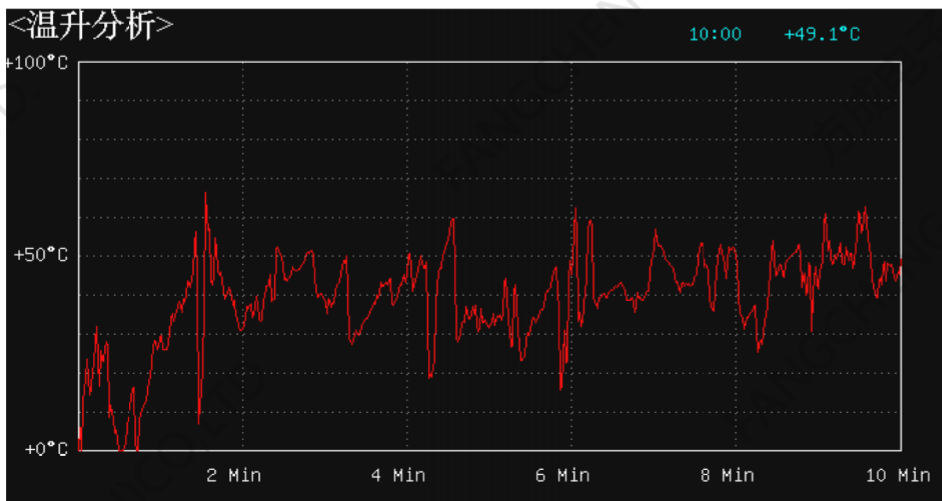
<3>Isat: The value of current indicates that inductance drops -30% (Typical) from its initial value

<4>Irms: The value of current indicates that the temperature of the coil is increase 40°C (Typical)

5. Inductance vs Isat Current

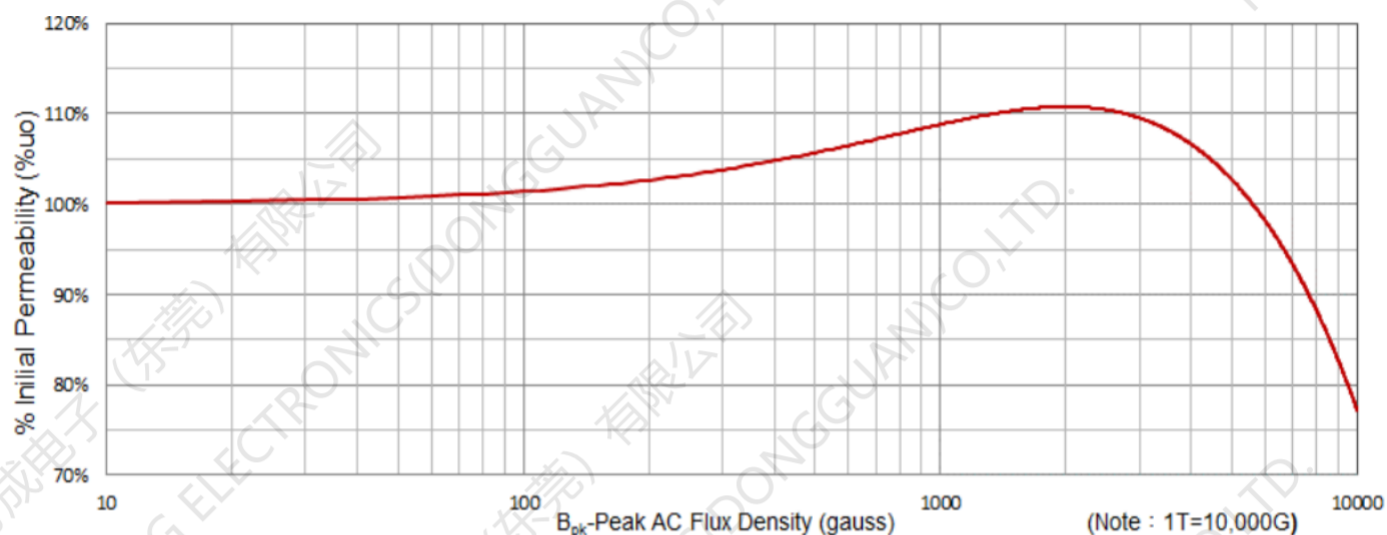


6. Temperature Rise vs Current:



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7. Percent Initial Permeability VS Peak AC Flux Density



7.2 Percent Initial permeability(μ_0) VS DC Magnetizing force

