# GRT65855T TYPE

#### **FEATURE**

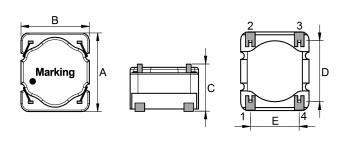
- 1. Excellent impedance characteristics, making it great for suppressing common mode noise.
- 2. Low profile design makes it optimal for surface mounting.

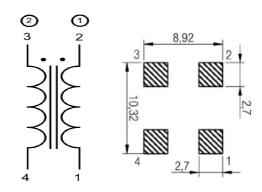
#### Applications

- 1. Current compensated choke for data and signal lines
- 2. Power supply system

## Shape and Dimension

# Schematics and Land Patterns(mm)





A=10.0±0.30m/m; B=9.0±0.50m/m; C=6.50m/m Max; D=7.71m/m TYP.; E=6.22m/m TYP.

## Specification

Part Number	Inductance (uH)	MARK	Impedance (Ω TYP.)	DCR (mΩ Max)	Irms(A) (Max)
GRT65855T-120uH-B	120±40%	121	460	25	2.5
GRT65855T-220uH-B	220±40%	221	780	32	2.2
GRT65855T-250uH-B	250±40%	251	970	35	2.0
GRT65855T-470uH-B	470±40%	471	1750	65	1.6
GRT65855T-1000uH-B	1000±40%	102	3600	180	0.95
GRT65855T-2200uH-B	2000±40%	202	7500	300	0.75
GRT65855T-3300uH-B	3300±40%	332	8900	360	0.65
GRT65855T-3900uH-B	3900±40%	392	9600	540	0.52
GRT65855T-4700uH-B	4700±40%	472	13000	720	0.35

Note1. Measurement frequency of Inductance value: at 100KHz, 0.1V

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Irms: Average current for 40°C temperature rise from 25°C ambient(typical)

## GENERAL CHARACTERISTICS

- 1. Operating temperature range: -40 TO + 125°C (Includes temperature when the coil is heated)
- 2. External appearance: On visual inspection, the coil has no external defects.
- 3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.

- 4. Insulating resistance: Over  $100M\Omega$  at 100V D.C. between coil and core.
- 5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- 6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C degree Celsius), inductance deviation within±5.0%, after 96 hours.
- 7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
- 8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- 9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- 10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- 11. Storage condition: Temperature Range:  $0^{\circ}$  ~  $35^{\circ}$  ; -40° ~ 125° (after PCB), Humidity Range: 50% ~ 70% RH
- 12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- 13. Reflow profile recommend:

#### Lead-free heat endurance test

Lead-free the recommended reflow condition

