



Description

- High current carrying capacity, Low core losses
- Magnetically shielded, low EMI
- 125 °C maximum total temperature operation
- Halogen Free
- RoHS compliant



Applications

- Automotive applications

Environmental Data

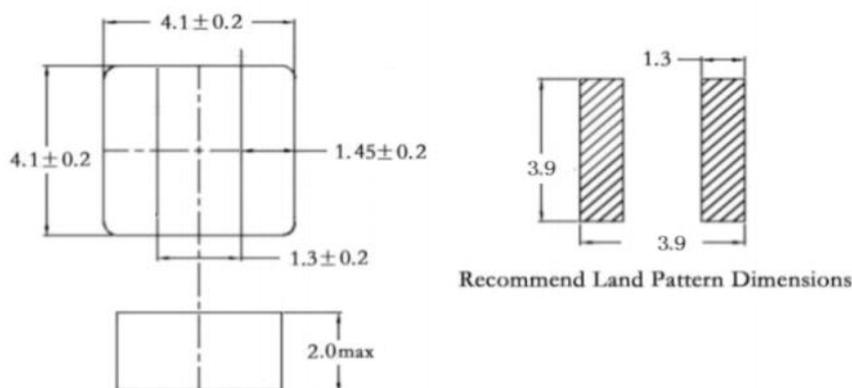
- Storage temperature range: -40°C to +125°C
- Operating temperature range: -40°C to +125 ° C (ambient plus self-temperature rise)
- Solder reflow temperature: J-STD-020 compliant

Product Identification

GXTC 0420 xxx M
① ② ③ ④

- ① Series name
- ② Dimensions
- ③ Inductance Value
- ④ Inductance Tolerance (M= ± 20%)

Dimensions-mm



Electrical Characteristics

Part Number	Inductance	DC Resistance		Heating Rating Current	Saturation Current
	L (uH)	DCR(mΩ)		A	A
	$\pm 20\%$, 1MHz, 0.1V	Typ	Max	Typ	Typ
GXTC-0420-R33-M	0.33	5	6	9.5	18
GXTC-0420-R47-M	0.47	7	8.5	8.5	16
GXTC-0420-1R0-M	1	12	14.5	6.5	12.5
GXTC-0420-1R5-M	15	18	22	6	10.5
GXTC-0420-2R2-M	2.2	30	36	5.5	9.5
GXTC-0420-2R2-M	2.2	30	36	5.5	9.5
GXTC-0420-4R7-M	4.7	47	58	5	6.3
GXTC-0420-100-M	10	113	135	3.4	4.9
GXTC-0420-150-M	15	210	250	2.3	3.5
GXTC-0420-220-M	22	275	330	1.8	2.9

Notes:

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 40°C to + 125 °C
3. I_{dc}(A):DC current (A) that will cause an approximate ΔT of 40 °C
4. I_{sat}(A):DC current (A) that will cause L₀ to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.