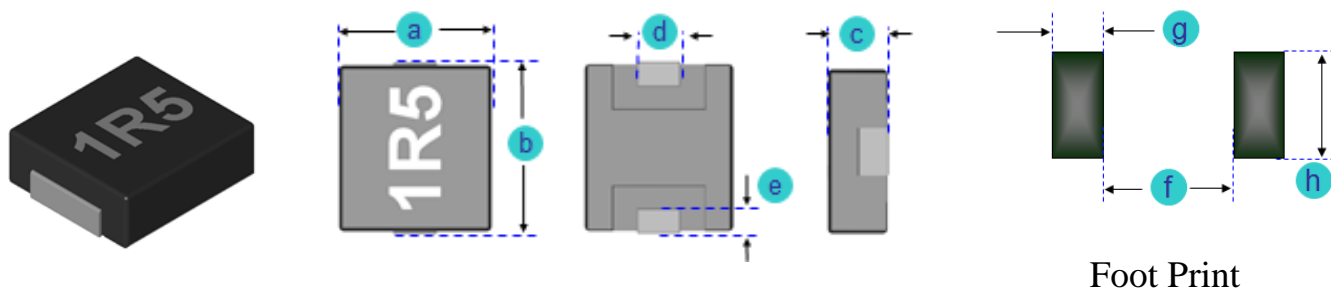


### A. Electrical Specifications

P/N	L (uH)	Tol.	Mark	Test Freq. (KHz)	DCR Typ. (mΩ)	DCR Max. (mΩ)	I sat. Typ. (A)	I rated Typ. (A)
MCS0420-R47MN2	0.47	M	R47	100	12.5	14.0	9.5	7.0
MCS0420-1R0MN2	1.0	M	1R0	100	24.0	27.0	7.0	4.5
MCS0420-1R5MN2	1.5	M	1R5	100	38.0	46.0	6.0	4.0
MCS0420-2R2MN2	2.2	M	2R2	100	52.0	58.0	5.0	3.0
MCS0420-3R3MN2	3.3	M	3R3	100	74.0	87.0	4.0	2.5
MCS0420-4R7MN2	4.7	M	4R7	100	92.0	105.0	3.0	2.2
MCS0420-6R8MN2	6.8	M	6R8	100	162.0	178.0	2.1	2.0

### B. Dimensions mm (Inch)

Series	a	b	c	d	e	f	g	h
MCS0420	4.45 (0.175)	4.0 (0.157)	1.8 (0.071)	1.5 (0.059)	0.8 (0.031)	2.2 (0.087)	1.5 (0.059)	2.5 (0.098)
Tol.	±0.25 (0.010)	±0.3 (0.012)	±0.2 (0.008)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.



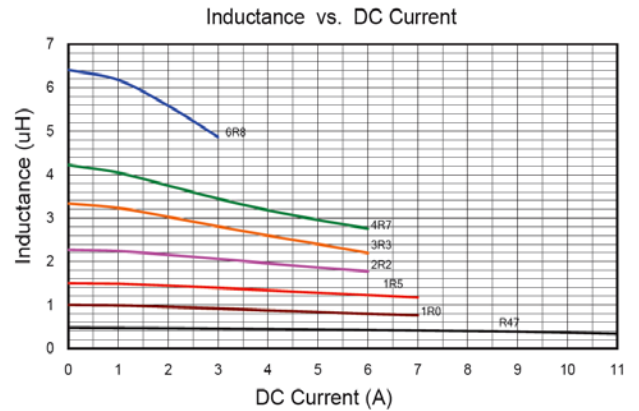
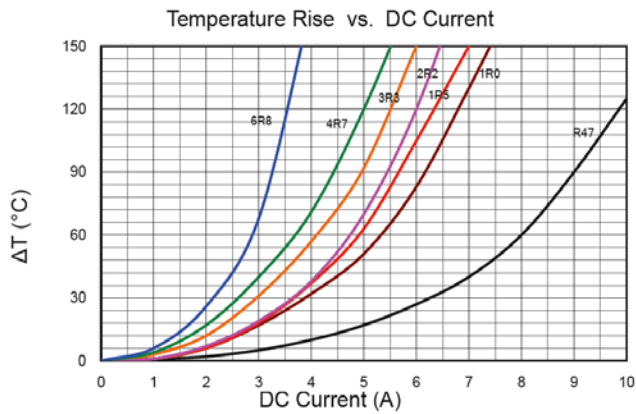
### C. General Information

1. P/N: MCS0420-XXXXMN2, “MCS0420” = Type, “XXX” = Inductance, “M” = Tolerance: M: ± 20%, “N2” = Internal control code
2. Magnetically shielded
3. High saturation current
4. Operating temperature: -55°C to +125°C
5. All test data is referenced to 25°C ambient.
6. Rated current (A) that will cause an approximate ΔT of 40°C.
7. I sat (A) that will cause Lo to drop approximately 30%.
8. 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.
9. Test Instrument: Chroma16502, Chroma11300.
10. Inductance and Current Range: From 0.47 uH (7.0 A) to 6.80 uH (2.0 A)
11. Unspecified values available on request.
12. Parts meet “RoHS + H. F.” requirements.
13. MSL: Level 1.

## D. Applications

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

## E. Characteristic Curve



## F. Supplementary Information

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

***We can produce this product to customer's unique specifications.***

