



深圳市佑驰电子有限公司

Specification for Approval

产品名称: 一体系列电感

规格型号: HCMA-0420-XXX-M

产品编号:

日期: 2020-08-15

- 1、本承认书的内容更改需经过双方确认，任一方单独的修改均视为无效。
- 2、本承认书在送达客户后，请给予承认并即签回，如无签回下订单的，我司有权以此承认书标准生产，并表示购买方默认许可。

	审核	制作

批准	审核	检验



REVISION					
REV	DESCRIPTION	DATE	DESIGNED	CHECKED	APPROVED
A0	文件建立	2020/08/15	吕秀秀	Bowen	Darren

High Current, Power Inductors HCMA-0420-XXX-M Power Choke



Description

- Halogen Free
- 125 °C maximum total temperature operation
- Powder iron core material
- Magnetically shielded, low EMI
- High current carrying capacity, Low core losses
- Inductance range from 0. 10 μ H to 10.0 μ H
- Current range from 2 .2 to 22 Amps
- Frequency range up to 5 MHz
- RoHS compliant

Applications

- Voltage Regulator Module (VRM)
- Multi-phase regulators
- Point-of-load modules
- Smart phone POL modules
- SSD modules
- Notebook regulators
- Battery power systems
- Graphics cards
- Data networking and storage systems

Environmental Data

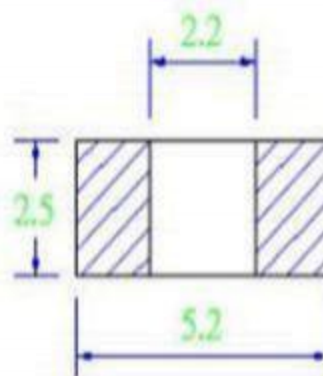
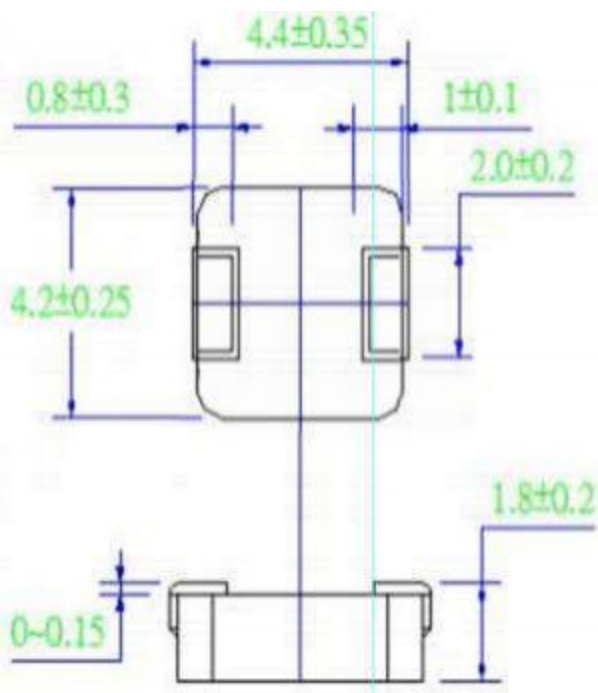
- Storage temperature range: -55 °C to +125 °C
- Operating temperature range: -55 °C to +125 °C (ambient plus self-temperature rise)
- Solder reflow temperature: J-STD-020 compliant

Description											
HCMA-0420-1R0 -M				1.0μH				±20 %			
Model				Inductance Value				Inductance Tolerance			
Global Part Number											
H	C	M	A	0	4	2	0	1	R	0	M
Product Series				Dimensions				Inductance		ValueTol.	

Part Number	Inductance	DC Resistance		HeatingRatingCurrent	Saturation Current
	L0 (μH)	DCR (mΩ)		Idc (A)	Isat (A)
	±20 %, 1MHz, 0.1V	Typ	Max	Typ	Typ
HCMA-0420-R10-M	0.10	3.5	4.0	12.0	22.0
HCMA-0420-R22-M	0.22	6.0	6.6	9.0	12.5
HCMA-0420-R47-M	0.47	9.5	14.0	7.0	9.5
HCMA-0420-R56-M	0.56	14.0	16.0	6.5	10.0
HCMA-0420-R68-M	0.68	16.0	18.0	6.0	9.0
HCMA-0420-1R0-M	1.0	24.0	27.0	4.5	7.0
HCMA-0420-1R2-M	1.2	24.0	27.0	4.5	7.0
HCMA-0420-1R5-M	1.5	38.0	46.0	4.0	6.0
HCMA-0420-2R2-M	2.2	52.0	58.0	3.0	5.0
HCMA-0420-3R3-M	3.3	74.0	87.0	2.5	4.0
HCMA-0420-4R7-M	4.7	92.0	105.0	2.2	3.0
HCMA-0420-5R6-M	5.6	107.6	115.0	2.0	3.5
HCMA-0420-6R8-M	6.8	160.0	175.0	2.0	2.5
HCMA-0420-100-M	10.0	256.0	282.0	1.6	2.2
HCMA-0420-200-M	22.0	336.1	360.0	1.5	1.8

Notes

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 125 °C
3. Idc(A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25°C)
4. Isat(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 applicat



Recommend Land Pattern Dimensions

Marking

The inductor is marked with a 3-digit code Example - -1.0 $\rightarrow$ 1R0

Note : Using Ink for marking

