SMT Shielded Power Inductors

SDCRH201610S/SDCRH252010S/SDCRH252012S

Features (特长)

- Magnetically shielded construction
  (闭磁路构造设计)
- Compact and thin (轻便薄小)
- Large Current and Low DCR
  (大电流低直流阻抗)

Applications (用途)

- DC-DC converter of portable equipment.
  (携带机器之直流转换器)
- Camcorder, LCD television set, Digital camera, P.D.A., Notebook.
  (摄影机、液晶电视、数位相机、P.D.A.、笔记型计算机)
- Small size communication equipment.
  (小型通信机器)

Product Identification (产品识别)

SDCRH201610S－ _____ ____ (Ex. SDCRH201610S-100M)

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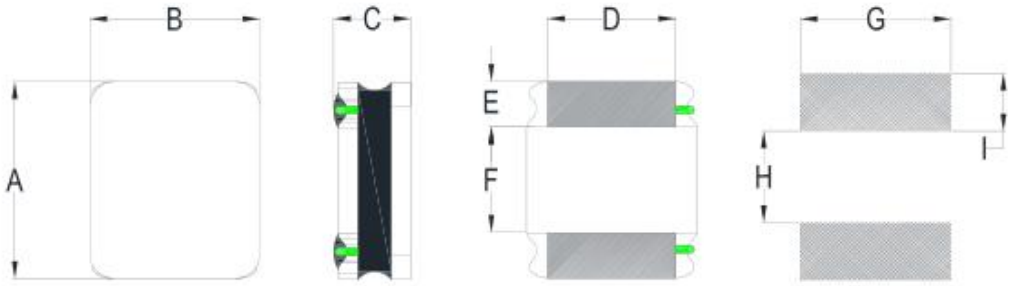
1. SMT Shielded Power Inductors (闭磁式功率电感)
   (SDCRH201610S/SDCRH252010S/SDCRH252012S)
2. Inductance (电感值)
3. Tolerance (误差值) (参照表 K:10%, L:15%, M:20%, N:30%)

Configurations & Dimensions (结构图及规格尺寸)



Type	A	B	C	D	E	F	G	H	I
SDCRH201610S	2.0±0.2	1.6±0.2	1.0(max)	1.2±0.2	0.6±0.2	0.8±0.2	1.6 Ref	0.70 Ref	0.70 Ref
SDCRH252010S	2.5±0.2	2.0±0.2	1.05(max)	1.5±0.2	0.8±0.2	0.8±0.2	2.0	0.8	0.85
SDCRH252012S	2.5±0.2	2.0±0.2	1.2(max)	1.5±0.2	0.8±0.2	0.8±0.2	2.0 Ref	0.8 Ref	0.85 Ref

♣Design as Customer's Requested Specifications. (可依客户特殊需求设计)

Codes	L (uH)	Tolerance	Test Freq. (MHz)	DCR(Ω)max			Isat (A)		
				201610S	252010S	252012S	201610S	252010S	252012S
R24	0.24	M	1MHz /1.0V	40	0.034	0.023	3.70	3.60	4.10
R33	0.33	M	1MHz /1.0V	48	0.043	0.031	3.00	3.60	4.00
R47	0.47	M	1MHz /1.0V	60	0.044	0.036	2.30	2.80	3.80
R68	0.68	M	1MHz /1.0V	76	0.062	0.047	1.95	2.75	3.00
1R0	1.0	M	1MHz /1.0V	114	0.080	0.060	1.65	2.05	2.25
1R2	1.2	M	1MHz /1.0V	-	-	0.078	-	-	2.20
1R5	1.5	M	1MHz /1.0V	174	0.108	0.090	1.35	1.70	2.00
1R8	1.8	M	1MHz /1.0V	-	-	0.108	-	-	1.95
2R2	2.2	M	1MHz /1.0V	265	0.150	0.108	1.20	1.50	1.75
2R7	2.7	M	1MHz /1.0V	-	-	0.156	-	-	1.30
3R3	3.3	M	1MHz /1.0V	345	0.228	0.156	1.00	1.10	1.20
4R7	4.7	M	1MHz /1.0V	480	0.330	0.228	0.75	1.00	1.10
5R6	5.6	M	1MHz /1.0V	-	0.480	0.330	-	0.90	1.00
6R8	6.8	M	1MHz /1.0V	800	0.480	0.360	0.70	0.80	0.90
8R2	8.2	M	1MHz /1.0V	940	0.572	-	0.68	0.73	-
100	10	M	1MHz /1.0V	1000	0.600	0.522	0.65	0.65	0.70
150	15	M	1MHz /1.0V	-	0.950	1.000	-	0.50	0.60
220	22	M	1MHz /1.0V	1700	-	1.290	0.32	-	0.45

Note:

※1: Rated current: Isat(max.)or Irise(max.),whichever is smaller;

※2: Saturation Current: Max. Value, DC current at which the inductance drops less than 30% from its value without current; Typ. Value, DC current at which the inductance drops 30% from its value without current;

For Max. Value, △T＜40℃; for Typ. Value, △T is approximate 40℃.

The part temperature (ambient + temp. rise) should not exceed 125℃ under worst case operating conditions.

Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.