

Data Sheet

Customer:

Product: Shielded Molding SMD Power Inductor – SDN Series

Part No.: SDN0530MT220-1

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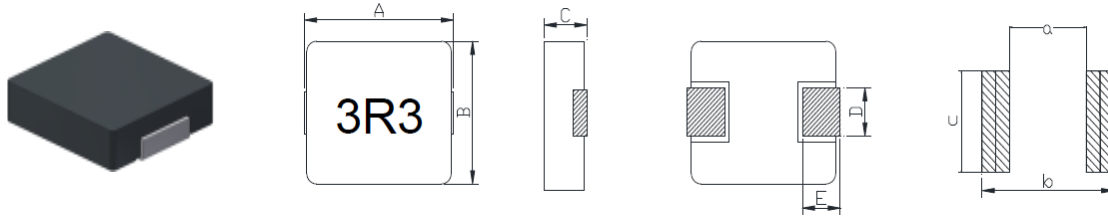
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Shielded Molding SMD Power Inductor



Features

- Low profile and low DCR
- Shielded construction
- Handles high transient current spikes without saturation
- Frequency up to 3MHz
- Ultra Low buzz noise, due to composite construction

Applications

- PDA/Notebook/Desktop, and server applications
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array(FPGA)

Dimensions

Unit: mm

Type	A	B	C	D	E	a	b	c
SDN0530	5.5±0.4	5.2±0.3	3.0 max	2.2±0.5	1.2±0.5	2.2	6.0	2.5

Characteristics

- Rated current: Isat or Irms, whichever is smaller
- Isat: DC current at which the inductance drops approximate 30% TYP from its value without current
- Irms: DC current that causes the temperature rise ($\Delta T = 40^{\circ}\text{C}$) from 25°C ambient.
- Absolute maximum voltage 30VDC
- All test data is referred to 25°C ambient
- Test equipment:
 - L: Wayne kerr 3260B LCR meter with Wayne kerr 3265B bias current source
 - DCR: Milli-ohm mete
- Operating temperature rang: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including self-heating)

Product Identification

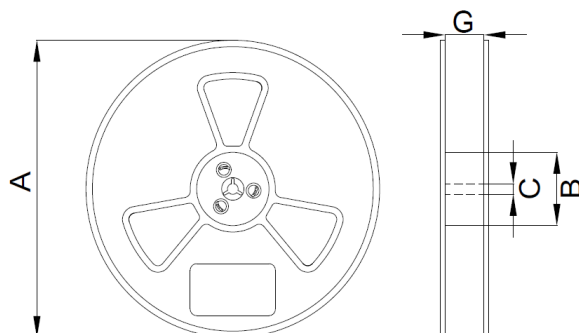
SDN	0530	M	T	220	-1
Product Type	Dimensions (BxC)	Inductor Tolerance	Packaging Style	Inductance	Special Code
	0530: 5.5×3.0	M: ±20%	T: Tape and Reel	220: 22μH	

Special Electrical Characteristics

Part No.	Inductance (uH)	Tolerance	Test Condition	DCR (mΩ) Max.	Saturation Current (A)	Temperature Rise Current (A)
SDN0530MT220-1	22	±20%	100KHz, 1V	260	1.90	1.30

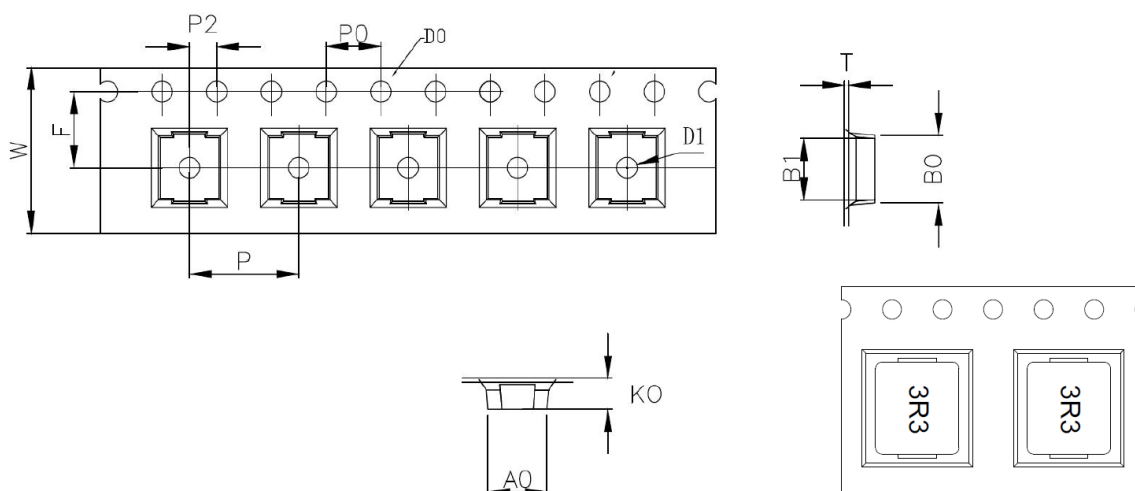
Packaging

Reel Specifications & Packaging Quantity



Type	Packaging Quantity	Tape Width	Reel Diameter	A (mm)	B (mm)	C (mm)	G (mm)
SDN0530	2000	12mm	13 inch	330.0±1.0	100.0±1.0	13.2±0.5	12.5±0.2

Embossed Plastic Tape Specifications



Type	A0 (mm)	B0 (mm)	W (mm)	K0 (mm)	P (mm)	F (mm)	E (mm)	D0 (mm)	D1 (mm)	P0 (mm)	P2 (mm)	T (mm)
SDN0530	5.7 typ	5.9 typ	12.0±0.3	3.4 typ	8.0±0.1	5.5±0.1	1.75±0.1	1.5±0.1	0.0±0.0	4.0±0.1	2.0±0.1	0.35 typ