

LPC4235 & LPC4545

power chip inductor

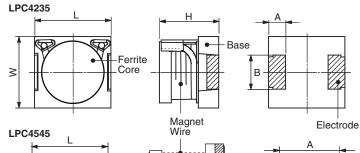




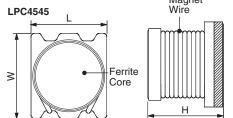
features

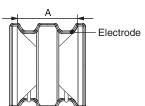
- Low DC resistance and high allowable current are realized by the original construction and wiring technology
- Automatic surface mounting is applicable
- · Excellent solderability and endurance environment
- Suitable for reflow soldering
- Marking: Black body color with no marking
- Products meet EU RoHS requirements
- AEC-Q200 Qualified

dimensions and construction



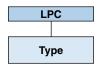
	Dimensions inches (mm)				
Size	L	W	H Max.	Α	В
4235		.165±.008 (4.2±0.2)			
4545		.181±.016 (4.6±0.4)			_





ordering information





4235			
Size			
4235			
4545			

Т
Termination Material
T: Sn (4235 only)
C: Sn/Cu (4545 only)

IED
Packaging
TM: taping (4235)
TE: taping (4545)

221	
Non Induc	ninal tance
3 digits	s
221: 2	20µH

K		
Tolerance		
K: ±10%		
M:±20%		

For further information on packaging, please refer to Appendix A.



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applications and ratings

Part Designation	Inductance (µH)	Inductance Tolerance	Self Resonant Frequency Minimum (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (Amps)
LPC4235TTM R82M	0.82		146.6	0.017	3.34
LPC4235TTM 1R0M	1.0		125.1	0.020	3.27
LPC4235TTM 1R2M	1.2		114.7	0.023	3.10
LPC4235TTM 1R5M	1.5	M000/	101.4	0.031	2.53
LPC4235TTM 2R2M	2.2	M: ±20%	78.8	0.039	2.28
LPC4235TTM 3R3M	3.3		66.7	0.070	1.63
LPC4235TTM 4R7M	4.7		52.0	0.090	1.44
LPC4235TTM 6R8M	6.8		43.5	0.109	1.29
LPC4235TTM 100K	10		33.5	0.190	0.91
LPC4235TTM 150K	15		29.1	0.230	0.87
LPC4235TTM 220K	22		21.7	0.366	0.69
LPC4235TTM 330K	33		13.9	0.542	0.52
LPC4235TTM 470K	47	K: ±10%	12.0	0.688	0.47
LPC4235TTM 680K	68		12.7	1.30	0.34
LPC4235TTM 101K	100		10.4	1.66	0.31
LPC4235TTM 151K	150		7.5	2.96	0.22
LPC4235TTM 221K	220		6.7	3.77	0.20
LPC4545CTE 1R0M	1.0		90.0	0.015	3.66
LPC4545CTE 1R5M	1.5		65.0	0.02	3.21
LPC4545CTE 2R2M	2.2	M: ±20%	50.0	0.023	2.96
LPC4545CTE 3R3M	3.3		40.0	0.044	2.19
LPC4545CTE 4R7M	4.7		35.0	0.062	1.81
LPC4545CTE 6R8M	6.8		25.0	0.075	1.60
LPC4545CTE 100K	10		23.0	0.1	1.43
LPC4545CTE 150K	15		15.0	0.15	1.04
LPC4545CTE 220K	22		13.0	0.21	0.88
LPC4545CTE 330K	33		10.0	0.41	0.60
LPC4545CTE 470K	47		9.0	0.52	0.53
LPC4545CTE 680K	68	16 100/	7.5	0.67	0.49
LPC4545CTE 101K	100	K: ±10%	5.5	0.92	0.41
LPC4545CTE 151K	150		5.0	1.8	0.29
LPC4545CTE 221K	220		4.0	2.25	0.26
LPC4545CTE 331K	330		2.5	4.27	0.19
LPC4545CTE 471K	470		2.0	5.23	0.17
LPC4545CTE 681K	680		1.8	6.67	0.15
LPC4545CTE 152K	1500		1.3	17.04	0.10
LPC4545CTE 222K	2200		0.9	35.0	0.07

Operating temperature range: $-40^{\circ}\text{C} - +125^{\circ}\text{C}$ (the self-temperature rise is contained)

Allowable current is a DC Current which causes initial inductance to decrease by 10%. Or coil temperature to rise by 40°C, whichever is smaller

environmental applications

Performance Characteristics

Parameter	Maximum Δ L	Test Method
High Temperature Exposure	±5%	+125°C ± 2°C, 1000 hours
Low Temperature Exposure	±5%	-40°C, 1000 hours
Moisture Exposure	±5%	+40°C ± 2°C, 90 - 95% RH, 1000 hours
Rapid Change of Temperature	±5%	-40°C (30 minutes)/+125°C (30 minutes), 100 cycles

Surface Temperature Rise graphs and additional environmental applications can be found at www.koaspeer.com

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.