



SMD MOLDED POWER INDUCTORS

LPM 0420,0630 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.) Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard, Tighter Tolerances Available

COMMON APPLICATIONS:

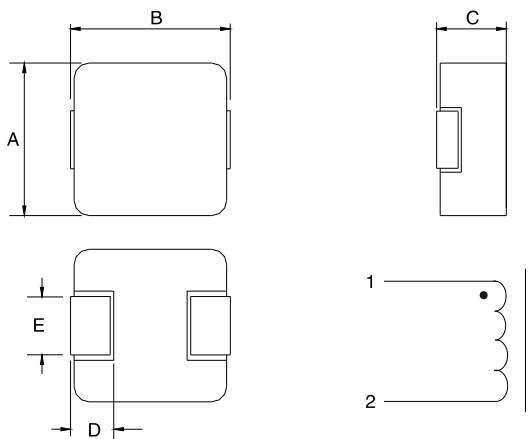
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ± 20% @0A dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)	Part Number	Inductance L0(μH) ± 20% @0A dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0420-R047M	0.047	15	15	2.5	3	LPM0630-R82M	0.82	13	24	4.9	7.8
LPM0420-R10M	0.1	12	12	4.5	5.5	LPM0630-1R0M	1.0	12	22	7.4	9.4
LPM0420-R22M	0.22	9.5	9.5	8	9.5	LPM0630-1R5M	1.5	10	18	8.6	14
LPM0420-R47M	0.47	6	6	17.5	19	LPM0630-2R2M	2.2	8	15	12.3	18
LPM0420-1R0M	1.0	4.2	4.5	41.5	43	LPM0630-3R3M	3.3	6	11.5	17.3	25
LPM0420-1R2M	1.2	3.75	3.75	54.5	55.6	LPM0630-4R7M	4.7	5.5	10	24.2	32
LPM0420-1R5M	1.5	3.25	3.25	67	68	LPM0630-5R6M	5.6	5.0	8.5	30.6	40
LPM0420-2R2M	2.2	2.75	3	77.5	79	LPM0630-6R8M	6.8	4.5	8.0	37	44
LPM0630-R20M	0.2	24	41	2	3.0	LPM0630-8R2M	8.2	4.0	6.5	50	60
LPM0630-R33M	0.33	20	30	2.1	3.4	LPM0630-100M	10	3.5	5.5	56	72
LPM0630-R47M	0.47	17.5	26	4.0	5.3	LPM0630-150M	15	3.0	5	84	105
LPM0630-R68M	0.68	16.0	25	4.6	6.4	LPM0630-220M	22	2.5	4.5	112	165

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.



Dimensions(mm)

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)		
LPM 0420	4.06 ± 0.254	4.45 ± 0.254	2.0 max.	0.76 ± 0.3	2.3 ± 0.2		
LPM 0630	6.6 ± 0.2	7.2 ± 0.2	3.0 max.	1.5 ± 0.5	3.0 ± 0.2		

Note:All specifications subject to change without notice.