

Large-Current Power Inductors MPLC Series

[RoHS Compliant]

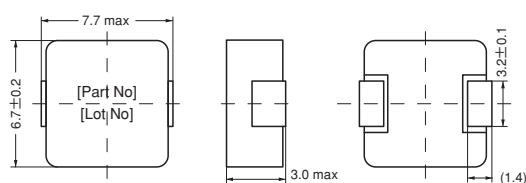


Model	Inductance at 100kHz, 1mA (μ H)	DC resistance (m Ω) max.	Rated current (A)	
			I _{rms} *1 (Ref.)	I _{sat} *2 (Ref.)
MPLC0730L1R0	1.0 $\pm$ 20%	9.0	10.6	11.0
MPLC0730L1R5	1.5 $\pm$ 20%	15.0	8.6	8.8
MPLC0730L2R2	2.2 $\pm$ 20%	19.0	7.3	8.2
MPLC0730L3R3	3.3 $\pm$ 20%	30.0	5.7	6.5
MPLC0730L4R7	4.7 $\pm$ 20%	41.0	5.0	5.6
MPLC1040L1R0	1.0 $\pm$ 20%	5.5	14.3	16.2
MPLC1040L1R5	1.5 $\pm$ 20%	7.0	12.4	12.7
MPLC1040L2R2	2.2 $\pm$ 20%	10.0	10.5	11.0
MPLC1040L3R3	3.3 $\pm$ 20%	14.0	8.8	9.3
MPLC1040L4R7	4.7 $\pm$ 20%	19.0	8.0	8.0

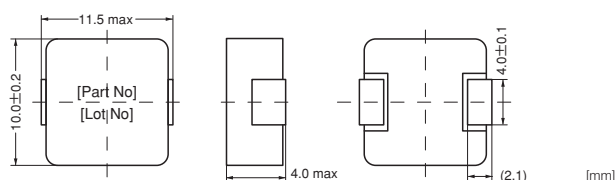
*1 T=40K rise at rated current. *2 Inductance drop 20% at rated current.
 ● Operating temperature range: -20 to +120°C (Including self-temperature rise)

Shape and Dimensions

● MPLC0730 Series

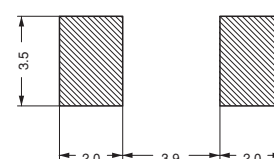


● MPLC1040 Series

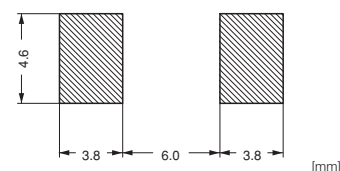


Recommended Land Pattern

● MPLC0730 Series

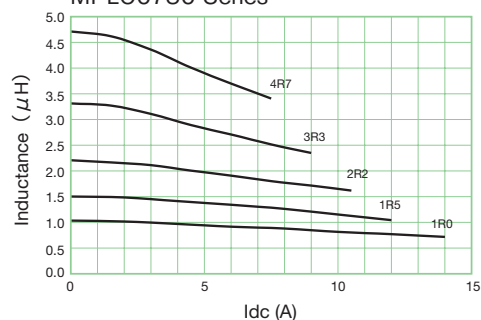


● MPLC1040 Series

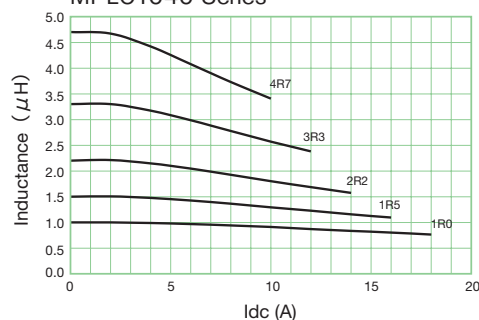


DC-Superposed Characteristics

MPLC0730 Series

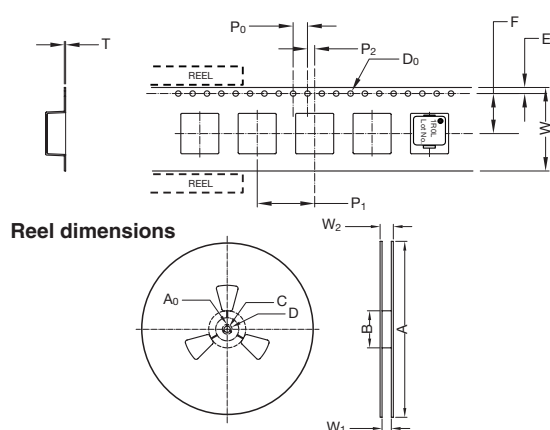


MPLC1040 Series



MPLC0730 Series (1000pcs./reel)

Dimensions of indented square hole plastic tape

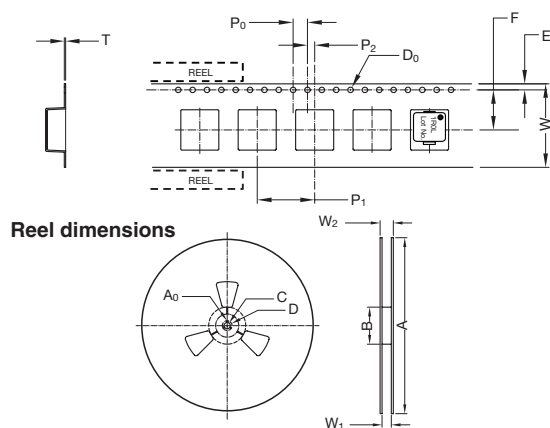


[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.05
16.0	7.5	1.75	12.0	2.0	4.0	1.55	0.4

[mm]							
A	B	C	D	A ₀	r	W ₁	W ₂
±5.0	±5.0	±0.5	±0.8	±0.5		±1.0	±1.0
330	80	13.0	21.0	2.0	R1.0	17.5	21.5

MPLC1040 Series (500pcs./reel)

Dimensions of indented square hole plastic tape



[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.05
24.0	11.5	1.75	16.0	2.0	4.0	1.55	0.4

[mm]							
A	B	C	D	A ₀	r	W ₁	W ₂
±2.0	±1.0	±0.5	±0.8	±0.5		±2.0	±3.0
330	80	13.5	21.0	2.0	R1.0	24.4	30.4

Large-Current Power Inductors MPLCG Series

[RoHS Compliant]

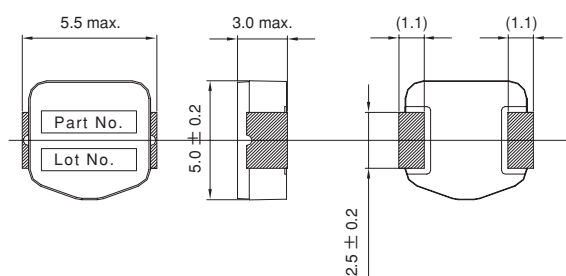


Model	Inductance (μ H) at 100kHz	DC resistance RDC (m Ω) max.	Rated current (A)	
			I _{rms} *1 (Ref.)	I _{sat} *2 (Ref.)
MPLCG0530LR22	0.22 $\pm$ 20%	3.7	14.1	10.2
MPLCG0530LR33	0.33 $\pm$ 20%	7.3	10.3	8.9
MPLCG0530LR47	0.47 $\pm$ 20%	8.4	9.5	8.9
MPLCG0530LR68	0.68 $\pm$ 20%	11.6	7.9	6.8
MPLCG0530LR82	0.82 $\pm$ 20%	12.4	7.7	6.7
MPLCG0530L1R0	1.00 $\pm$ 20%	14.6	7.4	5.6
MPLCG0530L1R5	1.50 $\pm$ 20%	21.7	5.9	5.6
MPLCG0530L2R2	2.20 $\pm$ 20%	36.4	4.5	5.0
MPLCG0530L3R3	3.30 $\pm$ 20%	58.0	3.6	3.1
MPLCG0530L4R7	4.70 $\pm$ 20%	74.0	3.1	3.0
MPLCG0630LR22	0.22 $\pm$ 20%	2.7	21.4	17.9
MPLCG0630LR33	0.33 $\pm$ 20%	4.3	16.9	17.3
MPLCG0630LR47	0.47 $\pm$ 20%	5.0	15.8	15.6
MPLCG0630LR68	0.68 $\pm$ 20%	6.0	14.2	12.6
MPLCG0630LR82	0.82 $\pm$ 20%	7.0	13.1	11.8
MPLCG0630L1R0	1.00 $\pm$ 20%	9.0	11.9	11.3
MPLCG0630L1R5	1.50 $\pm$ 20%	15.0	9.9	8.3
MPLCG0630L2R2	2.20 $\pm$ 20%	19.0	8.2	7.8
MPLCG0630L3R3	3.30 $\pm$ 20%	30.0	6.5	6.3
MPLCG0630L4R7	4.70 $\pm$ 20%	41.0	5.5	5.4
MPLCG0630L5R6	5.60 $\pm$ 20%	51.0	4.8	5.4
MPLCG0630L6R8	6.80 $\pm$ 20%	63.9	4.4	4.8
MPLCG0630L8R2	8.20 $\pm$ 20%	86.4	3.7	5.1
MPLCG0630L100	10.00 $\pm$ 20%	104.0	3.4	3.8

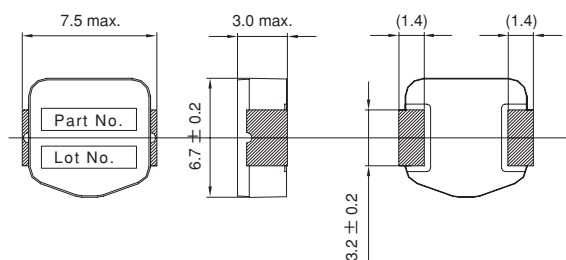
*1 T=40K rise at rated current. *2 Inductance drop 20% at rated current.
● Operating temperature range: -20 to +120°C (Including self-temperature rise)

Shape and Dimensions

● MPLCG0530 Series



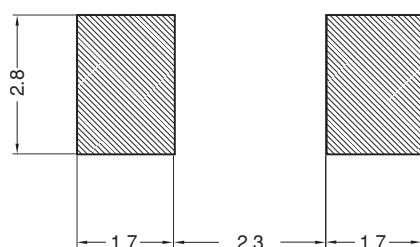
● MPLCG0630 Series



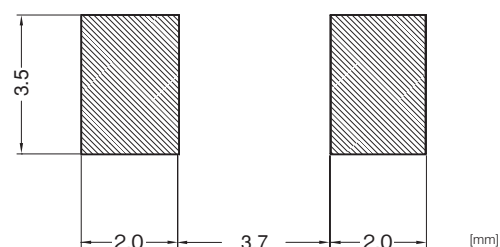
[mm]

Recommended Land Pattern

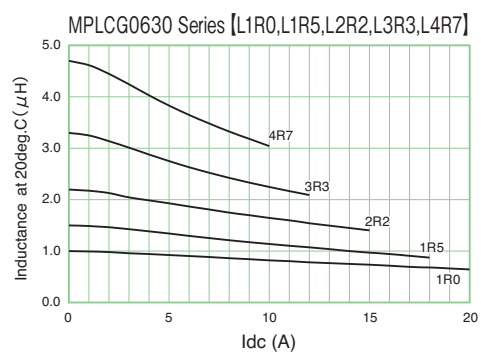
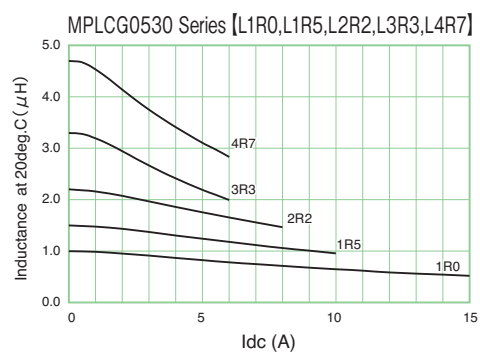
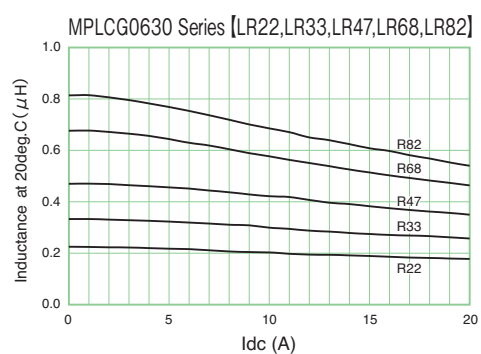
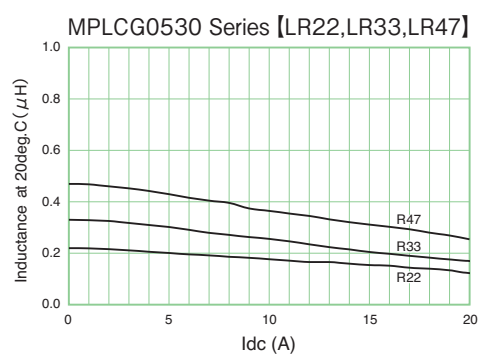
●MPLCG0530 Series

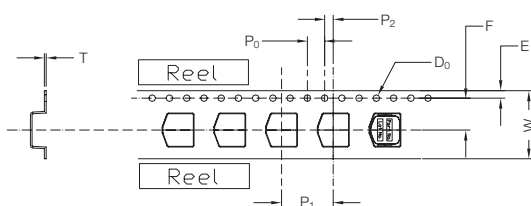


●MPLCG0630 Series

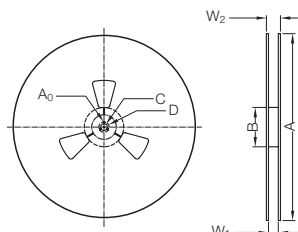


DC-Superposed Characteristics

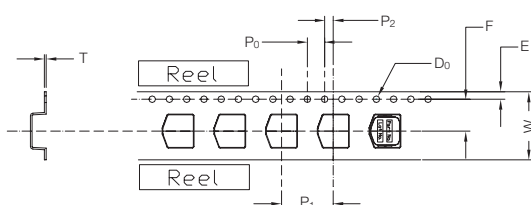


MPLCG0530 Series (3500pcs./reel)
Dimensions of indented square hole plastic tape


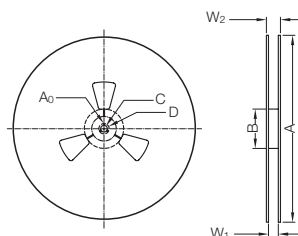
[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.05
12.0	5.5	1.75	8.0	2.0	4.0	1.55	0.4

Reel dimensions


[mm]							
A	B	C	D	A ₀	r	W ₁	W ₂
±5.0	±10	±1.0	±0.8	±0.5		±1.5	±2.0
380	95	13.5	21.0	2.0	R1.0	14.5	18.5

MPLCG0630 Series (2000pcs./reel)
Dimensions of indented square hole plastic tape


[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.05
16.0	7.5	1.75	12.0	2.0	4.0	1.55	0.4

Reel dimensions


[mm]							
A	B	C	D	A ₀	r	W ₁	W ₂
±5.0	±10	±1.0	±0.8	±0.5		±1.0	±1.5
380	95	13.5	21.0	2.0	R1.0	18.0	21.6