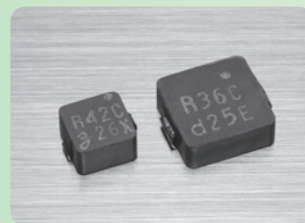


Large-Current Power Inductors MPC Series

[RoHS Compliant]

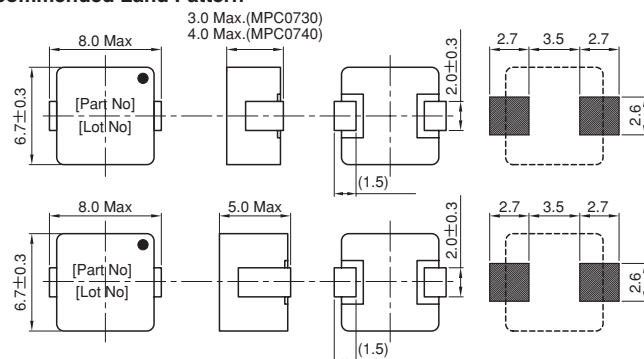


Model	Inductance (μ H) at 100kHz	DC resistance (m Ω) typ.	Rated current (A)	
			I _{rms} *1 (Ref.)	I _{sat} *2 (Ref.)
MPC0730LR20C	0.20 $\pm$ 25%	1.20 $\pm$ 10%	23.0	17.5
MPC0740LR42C	0.42 $\pm$ 20%	1.55 $\pm$ 10%	22.0	20.0
MPC0750LR60C	0.60 $\pm$ 20%	2.30 $\pm$ 10%	17.0	19.0
MPC0750LR68C	0.68 $\pm$ 20%	2.20 $\pm$ 10%	18.0	16.0
MPC1040LR36C	0.36 $\pm$ 20%	1.05 $\pm$ 10%	25.5	30.0
MPC1040LR45C	0.45 $\pm$ 20%	1.10 $\pm$ 10%	25.0	27.0
MPC1040LR56C	0.56 $\pm$ 20%	1.30 $\pm$ 10%	23.0	25.0
MPC1040LR88C	0.88 $\pm$ 20%	2.30 $\pm$ 10%	17.0	24.0
MPC1055LR36C	0.36 $\pm$ 20%	0.75 $\pm$ 10%	32.0	35.0
MPC1055L1R0C	1.00 $\pm$ 20%	2.30 $\pm$ 10%	18.5	21.0
MPC1250LR36C	0.36 $\pm$ 20%	0.65 $\pm$ 10%	38.0	40.0
MPC1250LR50C	0.50 $\pm$ 20%	0.80 $\pm$ 10%	35.0	40.0

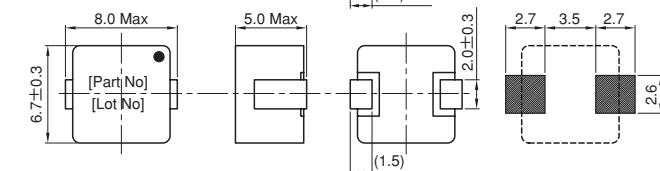
*1 T=40K rise at rated current. *2 Inductance drop 20% at rated current.
 ● Operating temperature range: -20 to +120°C (Including self-temperature rise)

Shape and Dimensions Recommended Land Pattern

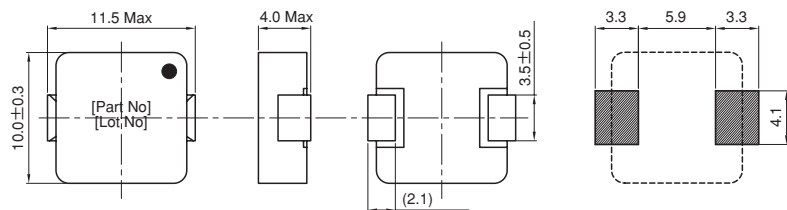
- MPC0730LR20C
- MPC0740LR42C



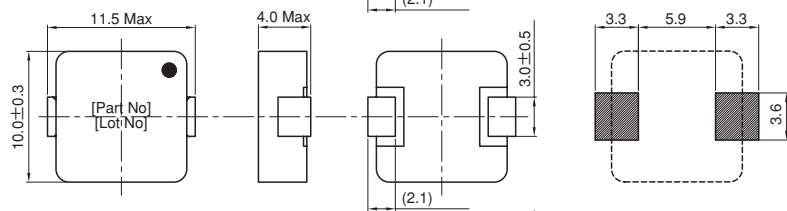
- MPC0750LR60C
- MPC0750LR68C



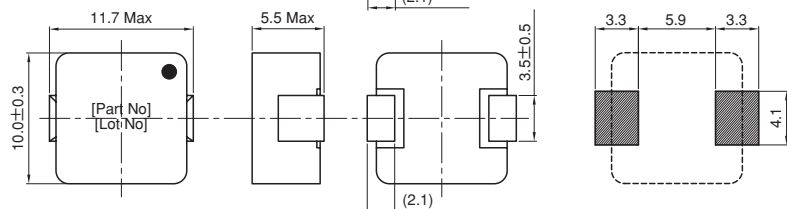
- MPC1040LR36C
- MPC1040LR45C
- MPC1040LR56C



- MPC1040LR88C



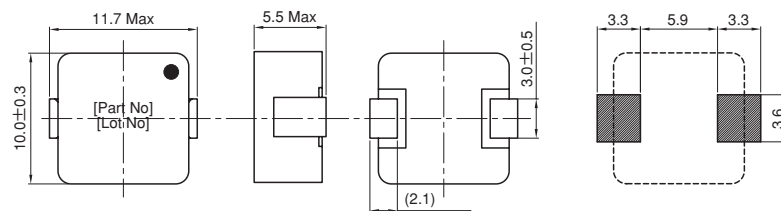
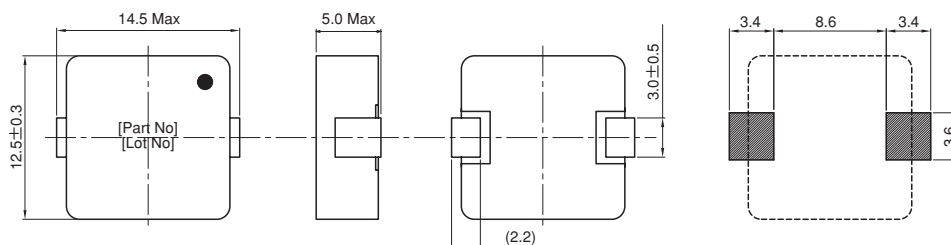
- MPC1055LR36C



[mm]

Shape and Dimensions Recommended Land Pattern

●MPC1055L1R0C

●MPC1250LR36C
●MPC1250LR50C

[mm]

Numbering System

MPC - 1040 - LR36C

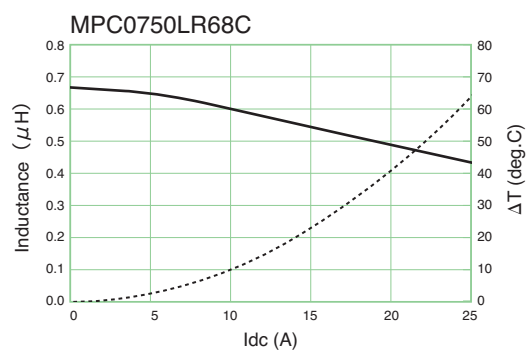
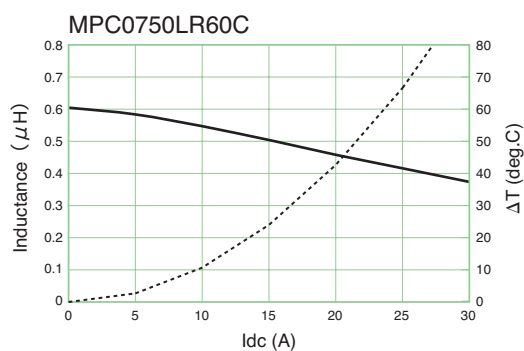
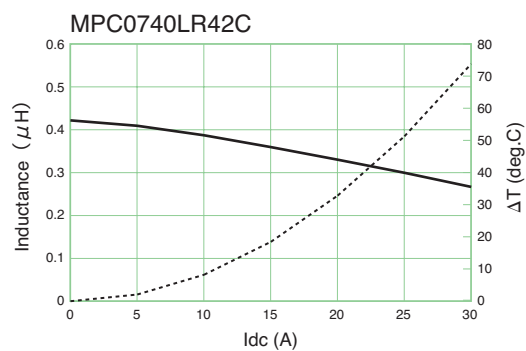
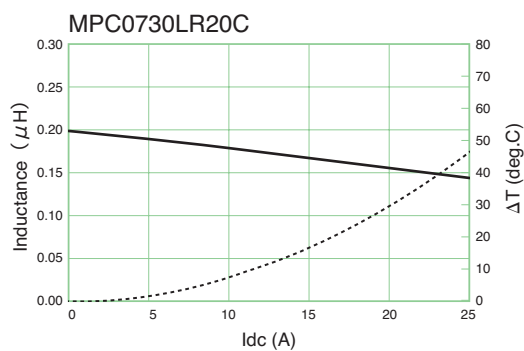
①

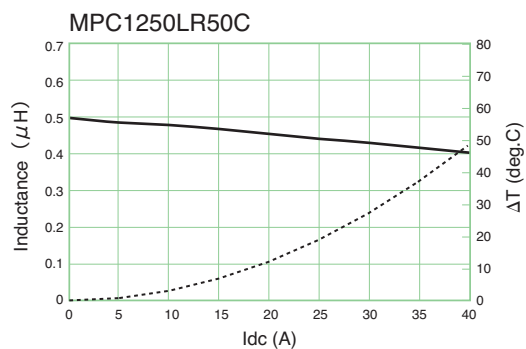
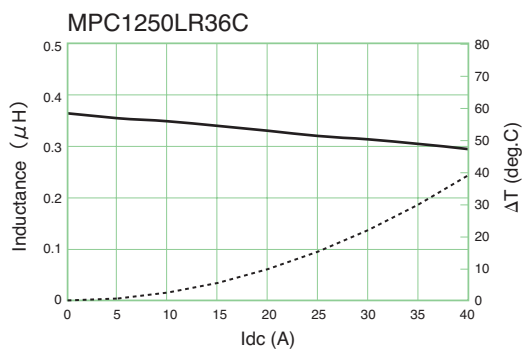
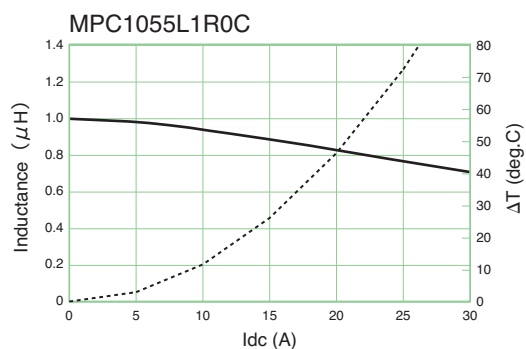
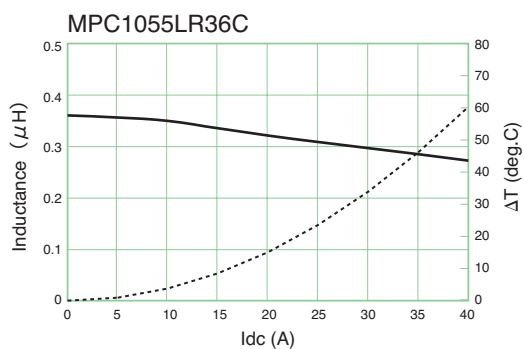
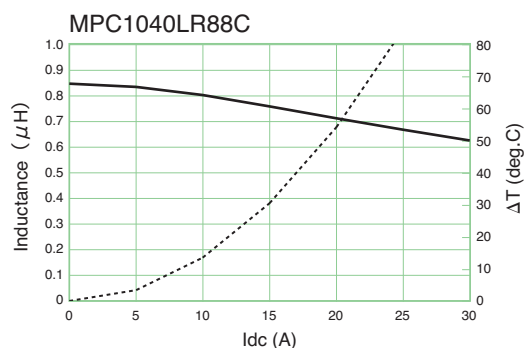
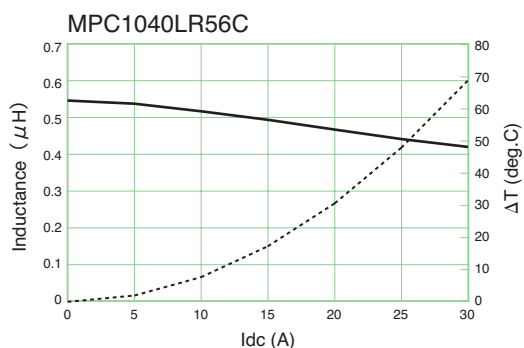
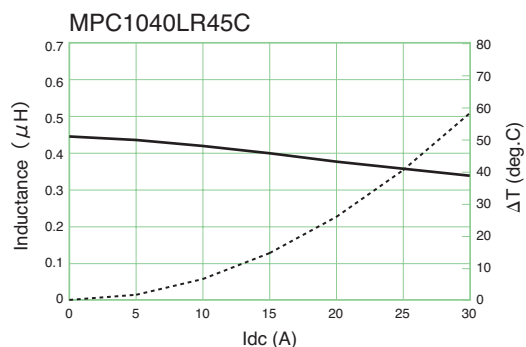
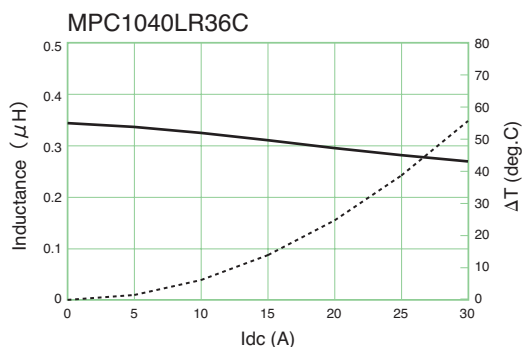
②

③

- ① Series
② Dimensions 10···W×D:11.5×10 mm 40···H:4.0 mm
③ Inductance R36···0.36μH

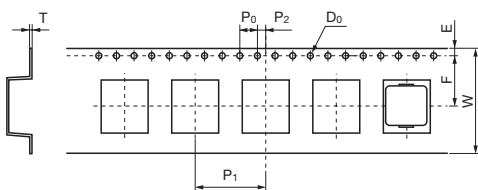
DC-Superposed Characteristics



DC-Superposed Characteristics


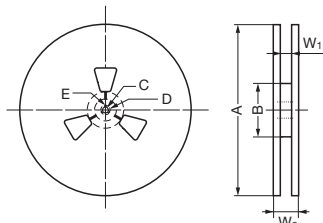
MPC0730, MPC0740, MPC0750 Series (1000pcs./reel)

Dimensions of indented square hole plastic tape



[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.2	±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

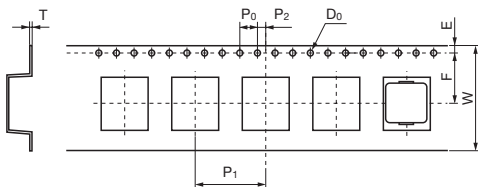
Reel dimensions



[mm]							
A	B	C	D	E	r	W ₁	W ₂
±2.0	±1.0	±0.2	±0.8	±0.5		±1.0	±1.0
330	80	13.0	21.0	2.0	R1.0	17.5	21.5

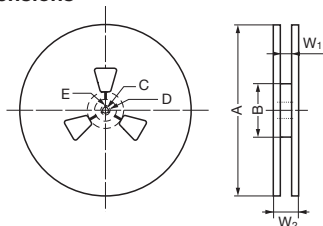
MPC1040 Series (500pcs./reel)

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

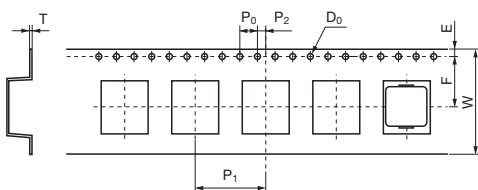
Reel dimensions



[mm]							
A	B	C	D	E	r	W ₁	W ₂
±5.0	±5.0	±0.5	±1.0	±0.5		±2.0	±3.0
330	80	13.5	21.0	2.0	R1.0	24.4	30.4

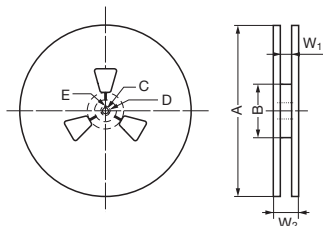
MPC1055 Series (500pcs./reel)

Dimensions of indented square hole plastic tape

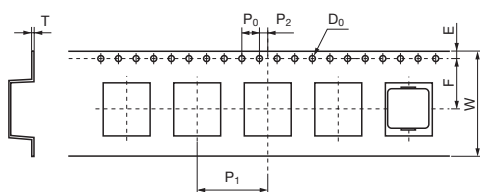


[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.2	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.05
24.0	11.5	1.75	24.0	2.0	4.0	1.55	0.4

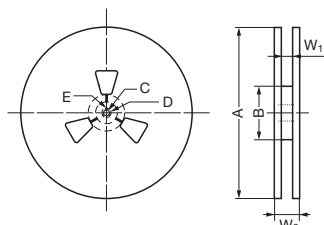
Reel dimensions



[mm]							
A	B	C	D	E	r	W ₁	W ₂
±2.0	±1.0	±0.5	±0.8	±0.5		±2.0	±3.0
380	100	13.0	21.0	2.0	R1.0	24.4	30.4

MPC1250 Series (500pcs./reel)
Dimensions of indented square hole plastic tape


[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.4	±0.2	±0.2	±0.2	±0.2	±0.2	±0.02	±0.1
24.0	11.5	1.75	24.0	2.0	4.0	1.5	0.4

Reel dimensions


[mm]							
A	B	C	D	E	r	W ₁	W ₂
±2.0	±5.0	±0.5	±0.8	±0.5		±2.0	±3.0
380	100	13.0	21.0	2.0	R1.0	25.5	28.5

Large-Current Power Inductors

MPCG Series <Low-Loss Series>

[RoHS Compliant]

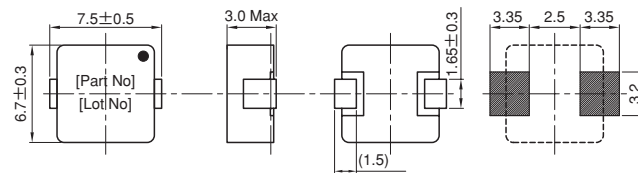


Model	Inductance (μ H) at 100kHz	DC resistance (m Ω) typ.	Rated current (A)	
			I _{rms} *1 (Ref.)	I _{sat} *2 (Ref.)
MPCG0730LR40	0.40 $\pm$ 20%	2.60 $\pm$ 10%	16.0	16.0
MPCG0740LR42	0.42 $\pm$ 20%	1.55 $\pm$ 10%	22.0	20.0
MPCG1040LR36	0.36 $\pm$ 20%	1.05 $\pm$ 10%	25.0	30.0
MPCG1040LR45	0.45 $\pm$ 20%	1.10 $\pm$ 10%	25.0	27.0
MPCG1040LR56	0.56 $\pm$ 20%	1.30 $\pm$ 10%	23.0	23.0
MPCG1040LR88	0.88 $\pm$ 20%	2.30 $\pm$ 10%	17.0	19.0

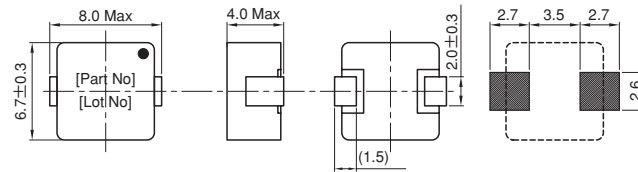
*1. T=40K rise at rated current. *2. Inductance drop 20% at rated current.
 ● Operating temperature range: -20 to +120°C (Including self-temperature rise)

Shape and Dimensions Recommended Land Pattern

● MPCG0730LR40



● MPCG0740LR42

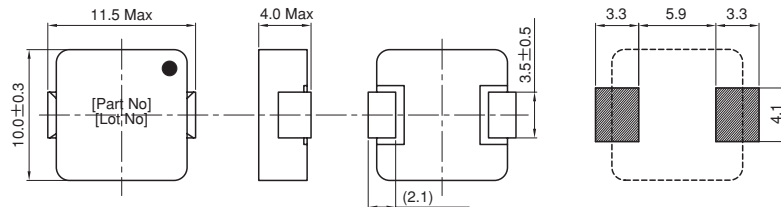


● MPCG1040LR36

● MPCG1040LR45

● MPCG1040LR56

● MPCG1040LR88



[mm]

Numbering System

MPCG - 1040 - LR36

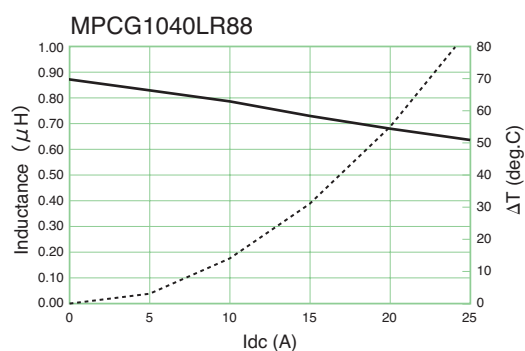
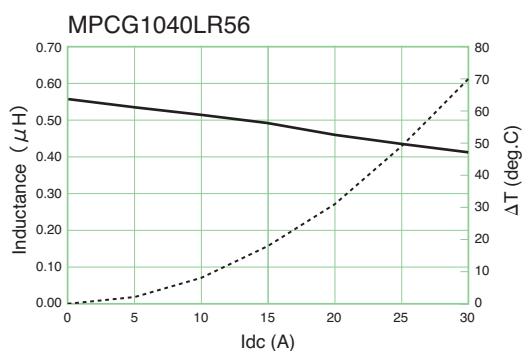
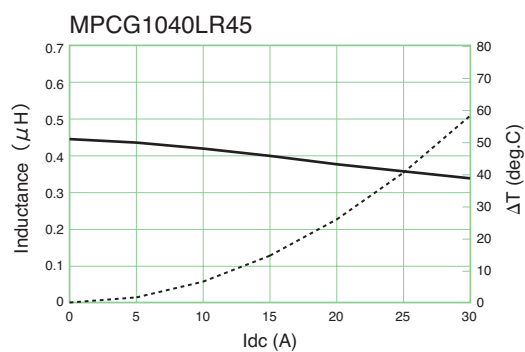
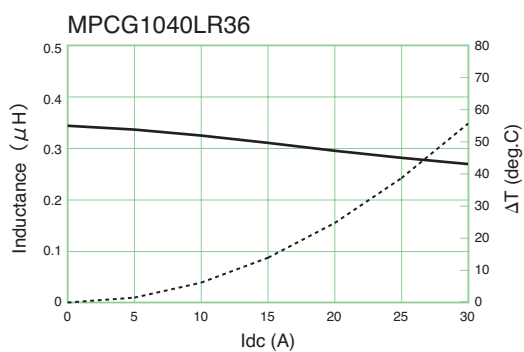
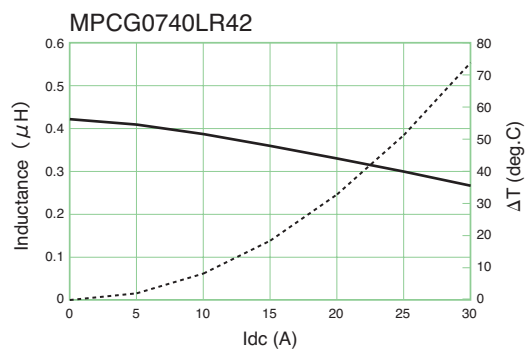
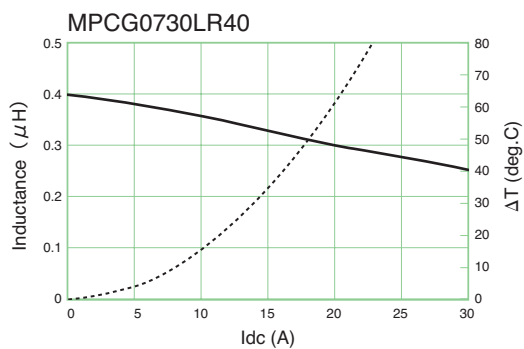
①

②

③

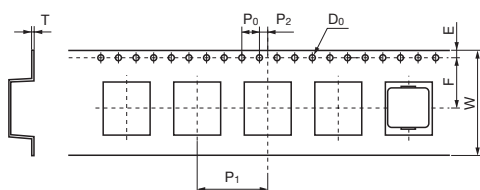
- ① Series
 ② Dimensions 10...WxD:11.5x10 mm 40...H:4.0 mm
 ③ Inductance R36...0.36 μ H

DC-Superposed Characteristics



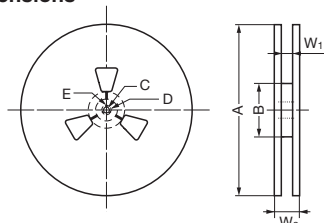
MPCG0730, MPCG0740 Series (1000pcs./reel)

Dimensions of indented square hole plastic tape



[mm]							
W	F	E	P ₁	P ₂	P ₀	D ₀	T
±0.2	±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

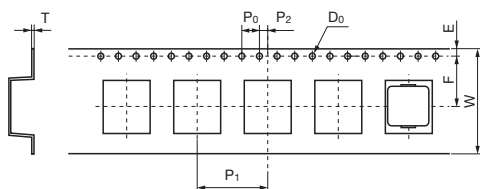
Reel dimensions



[mm]							
A	B	C	D	E	r	W ₁	W ₂
±2.0	±1.0	±0.2	±0.8	±0.5		±1.0	±1.0
330	80	13.0	21.0	2.0	R1.0	17.5	21.5

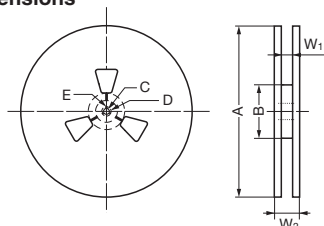
MPCG1040 Series (500pcs./reel)

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

Reel dimensions



[mm]							
A	B	C	D	E	r	W ₁	W ₂
±5.0	±5.0	±0.5	±1.0	±0.5		±2.0	±3.0
330	80	13.5	21.0	2.0	R1.0	24.4	30.4