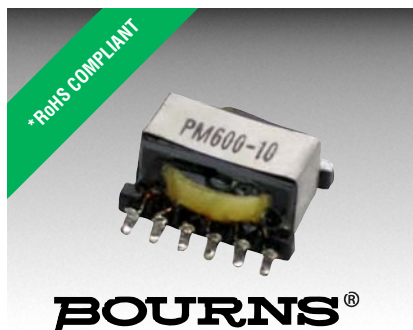




Features

- Formerly J. W. Miller* model
- Six windings - multiple configurations
- Compact size
- Tape and reel packaging
- RoHS compliant*

Applications

- Inductors: Buck-boost, coupled, filtering, common mode
- Transformers: Flyback, push-pull, inverter, gate drive, isolation

PM600/PM610/PM620 Series - SMD Inductor/Transformer

Electrical Specifications

Bourns Part No.	Inductance 100 KHz		DCR (Ω) Max.	Isat (A)	Irms (A)	<1> ET (VmS) Based on 40 °C Rise (260 KHz)	<1> ET (VmS) Based on Core Saturation
	(μ H)	Tol. (%)					
PM600-01-RC	201.6	± 30	0.324	0.02	0.46	16.8	103.2
PM600-02-RC	89.6	± 30	0.137	0.03	0.71	11.2	68.8
PM600-03-RC	27.4	± 10	0.324	0.31	0.46	16.8	103.2
PM600-04-RC	12.2	± 10	0.137	0.47	0.71	11.2	68.8
PM600-05-RC	14.7	± 10	0.324	0.58	0.46	16.8	103.2
PM600-06-RC	6.5	± 10	0.137	0.87	0.71	11.2	68.8
PM600-07-RC	10.9	± 10	0.324	0.88	0.46	16.8	103.2
PM600-08-RC	4.9	± 10	0.137	1.32	0.71	11.2	68.8
PM600-09-RC	8.5	± 10	0.324	1.23	0.46	16.8	103.2
PM600-10-RC	3.8	± 10	0.137	1.85	0.71	11.2	68.8
PM610-01-RC	160.0	± 30	0.202	0.04	0.68	21.0	130
PM610-02-RC	78.4	± 30	0.094	0.06	1.00	14.7	91
PM610-03-RC	21.6	± 10	0.202	0.67	0.68	21.0	130
PM610-04-RC	10.6	± 10	0.094	0.96	1.00	14.7	91
PM610-05-RC	11.6	± 10	0.202	1.30	0.68	21.0	130
PM610-06-RC	5.7	± 10	0.094	1.86	1.00	14.7	91
PM610-07-RC	8.3	± 10	0.202	2.00	0.68	21.0	130
PM610-08-RC	4.1	± 10	0.094	2.86	1.00	14.7	91
PM610-09-RC	6.6	± 10	0.202	2.30	0.68	21.0	130
PM610-10-RC	3.2	± 10	0.094	3.29	1.00	14.7	91
PM620-01-RC	160.6	± 30	0.094	0.03	1.28	20.8	130
PM620-02-RC	77.0	± 30	0.065	0.04	1.54	14.4	90
PM620-03-RC	131.8	± 20	0.094	0.08	1.28	20.8	130
PM620-04-RC	63.2	± 20	0.065	0.12	1.54	14.4	90
PM620-05-RC	23.3	± 10	0.094	0.36	1.28	20.8	130
PM620-06-RC	11.2	± 10	0.065	0.52	1.54	14.4	90
PM620-07-RC	14.2	± 10	0.094	0.76	1.28	20.8	130
PM620-08-RC	6.8	± 10	0.065	1.10	1.54	14.4	90
PM620-09-RC	9.3	± 10	0.094	1.11	1.28	20.8	130
PM620-10-RC	4.5	± 10	0.065	1.60	1.54	14.4	90
PM620-11-RC	7.9	± 10	0.094	1.40	1.28	20.8	130
PM620-12-RC	3.8	± 10	0.065	2.02	1.54	14.4	90

General Specifications

Rated Current..... Ind. drop of 30 % typ.
at Isat
 Temperature Rise ... 40 °C typical at Irms
 Operating Temperature
 -40 °C to +105 °C
 Storage Temperature
 -40 °C to +105 °C
 Soldering 245 °C, 5 seconds max.
 Dielectric Strength 500 Vrms
 between windings

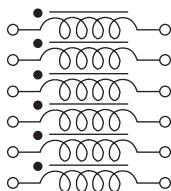
Materials

Core..... Ferrite
 Wire Polyurethane-coated copper
 Terminal Coating..... Sn-Ag-Cu alloy
 Packaging
 PM600..... 600 pcs. per 13-inch reel
 PM610..... 300 pcs. per 13-inch reel
 PM620..... 200 pcs. per 13-inch reel

<1> Single or multi-windings in parallel. ET of multiple winding in series is number of windings times value of ET.

Typical Configurations

Inductor:



Basic Diagram

Inductance: L
Current: I

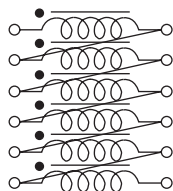


Figure 1

Inductance: $36 \times L$
Current: I

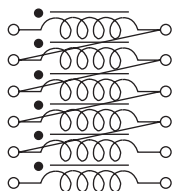


Figure 2

Inductance: $25 \times L$
Current: I

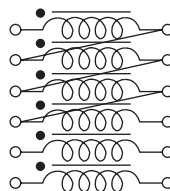


Figure 3

Inductance: $16 \times L$
Current: I

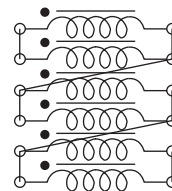


Figure 4

Inductance: $9 \times L$
Current: $2 \times I$

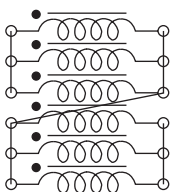


Figure 5

Inductance: $4 \times L$
Current: $3 \times I$

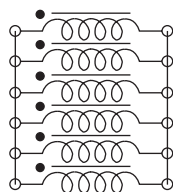
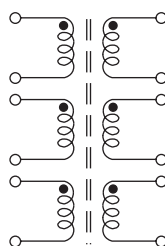


Figure 6

Inductance: L
Current: $6 \times I$

Transformer:



Basic Diagram

Turns Ratio:
 $1:1:1:1:1:1$

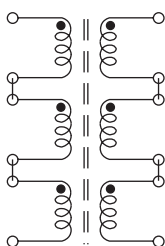


Figure 1

Turns Ratio:
 $1:1$

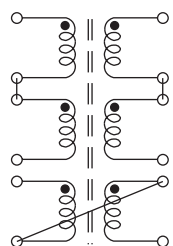


Figure 2

Turns Ratio:
 $1:1:1$

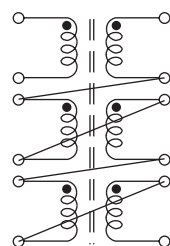


Figure 3

Turns Ratio:
 $1:5$ or $5:1$

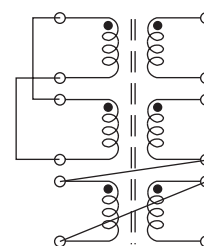


Figure 4

Turns Ratio:
 $1:4$ or $4:1$

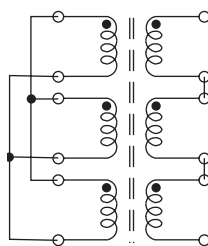


Figure 5

Turns Ratio:
 $1:3$ or $3:1$

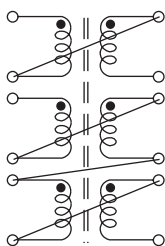


Figure 6

Turns Ratio:
 $1:2$ or $2:1$

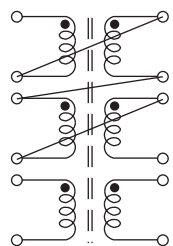


Figure 7

Turns Ratio:
 $4:1:1$

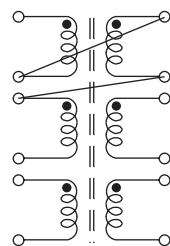


Figure 8

Turns Ratio:
 $3:1:1:1$

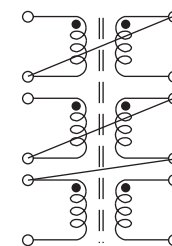


Figure 9

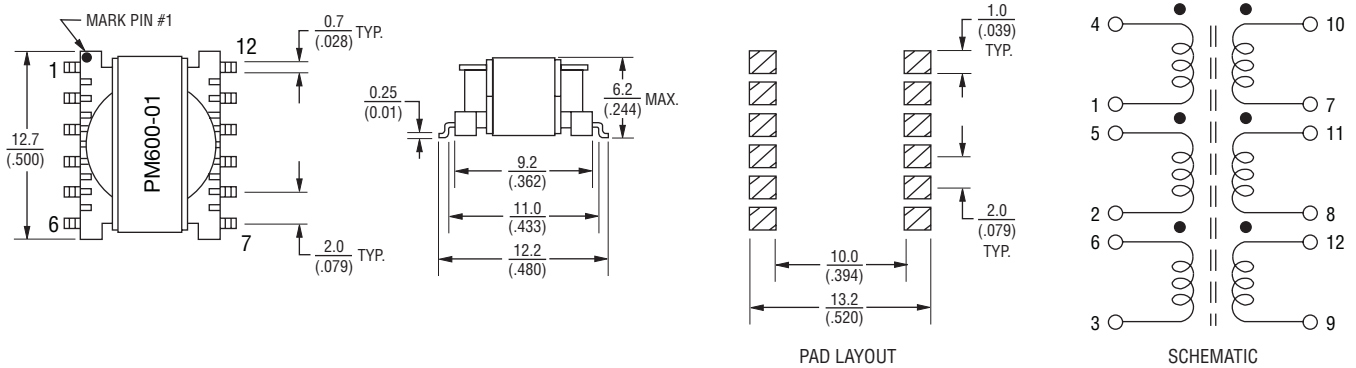
Turns Ratio:
 $2:3$ or $3:2$

PM600/PM610/PM620 Series - SMD Inductor/Transformer

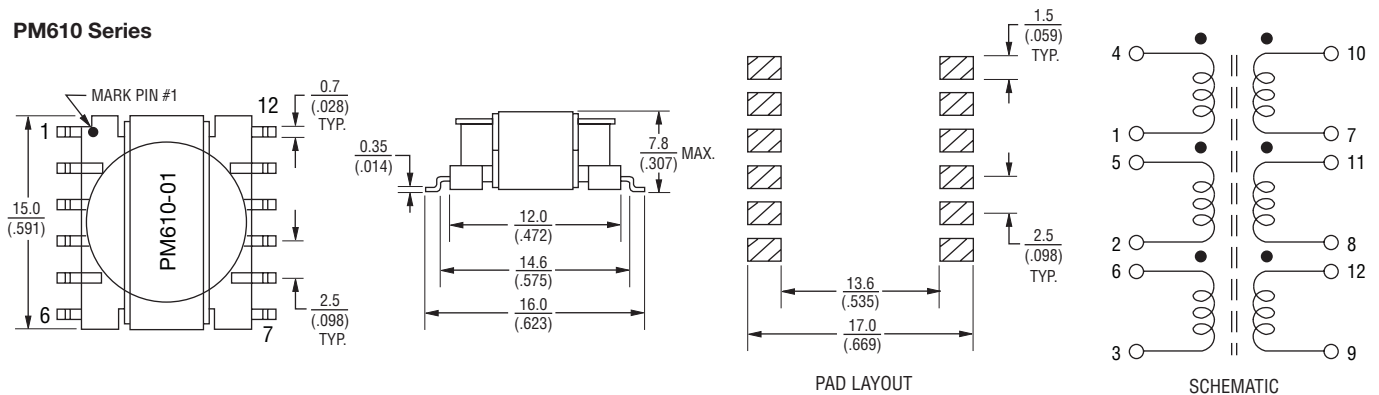
BOURNS®

Product Dimensions

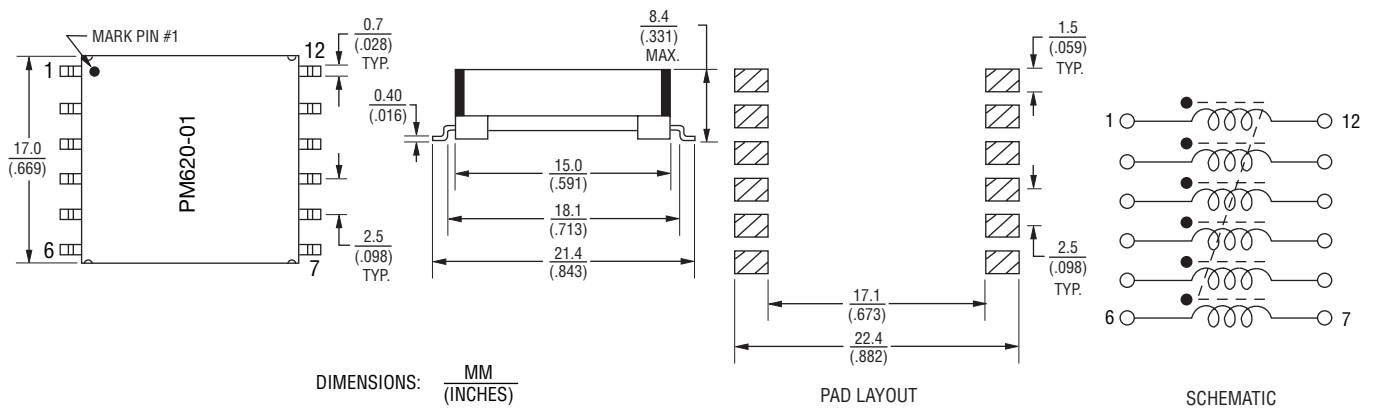
PM600 Series



PM610 Series



PM620 Series



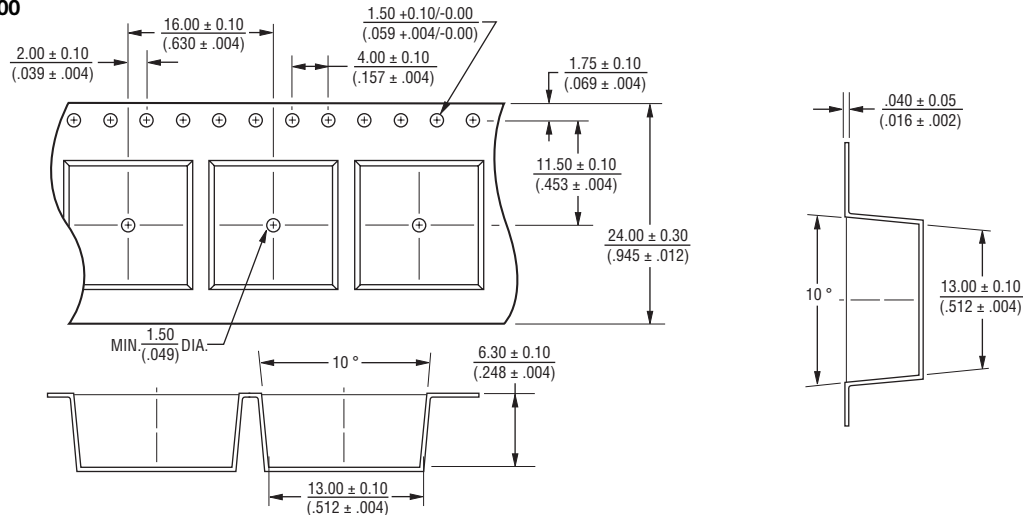
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

PM600/PM610/PM620 Series - SMD Inductor/Transformer

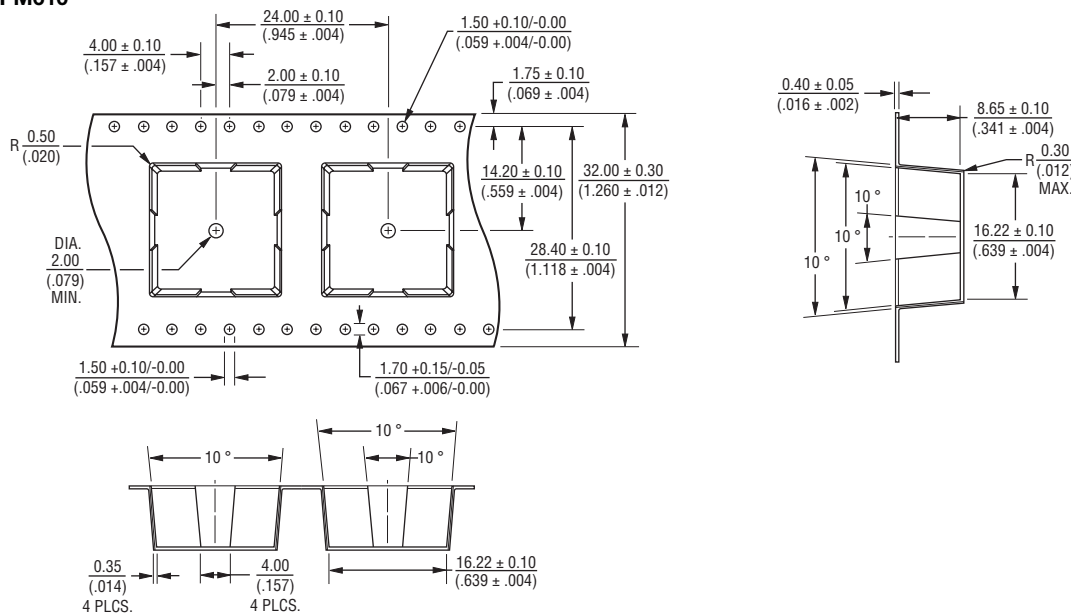
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Packaging Specifications

PM600



PM610



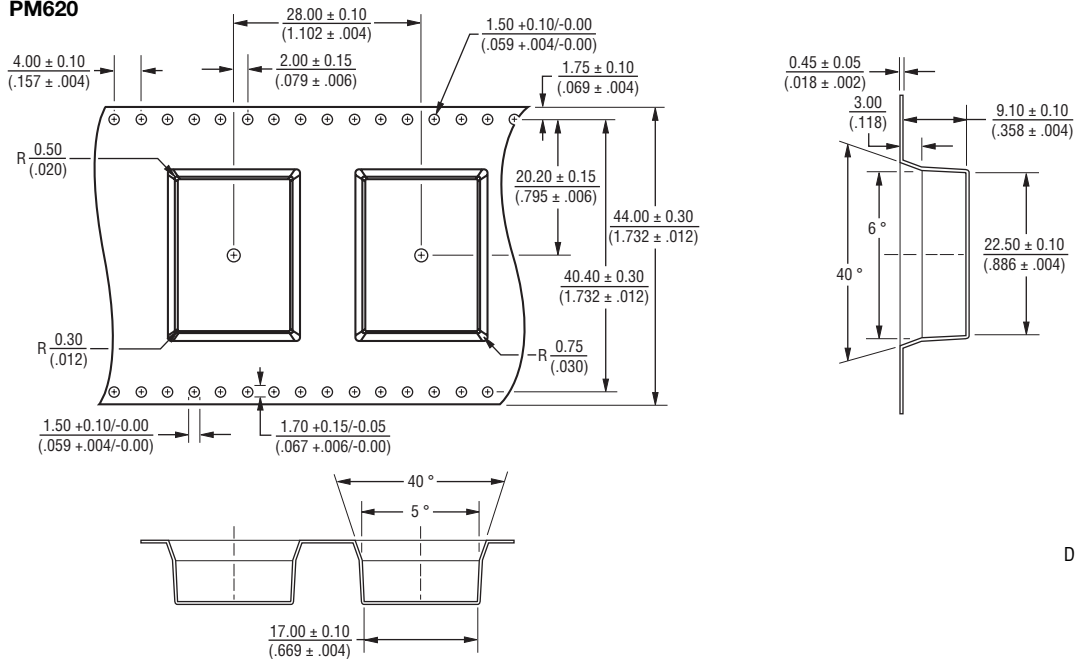
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

PM600/PM610/PM620 Series - SMD Inductor/Transformer

BOURNS®

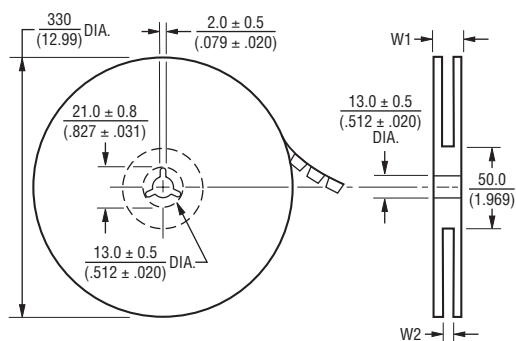
Packaging Specifications (Continued)

PM620

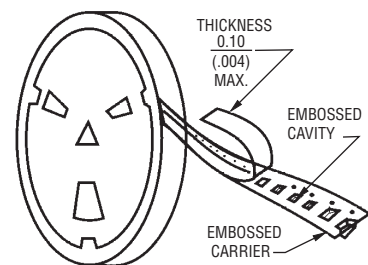


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

<1> Single or multi-windings in parallel. ET of multiple winding in series is number of windings times value of ET.



	W1	W2
PM600	$\frac{30.4}{(1.197)}$	$\frac{26.0}{(1.024)}$
PM610	$\frac{38.4}{(1.512)}$	$\frac{34.0}{(1.339)}$
PM620	$\frac{50.4}{(1.984)}$	$\frac{46.0}{(1.811)}$



REV. 06/08

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Mouser Electronics

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Bourns:

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