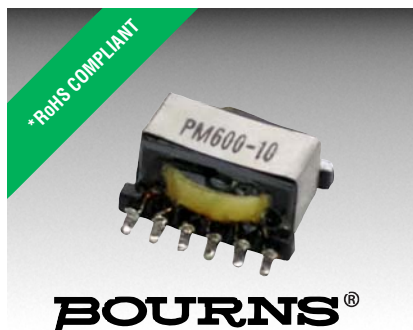




Features

- 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

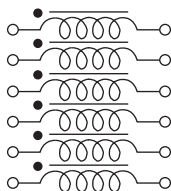
Materials

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

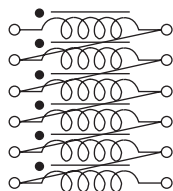


Figure 1

Inductance: $36 \times L$
Current: I

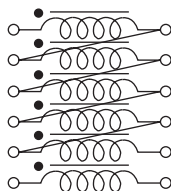


Figure 2

Inductance: $25 \times L$
Current: I

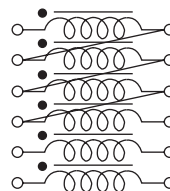


Figure 3

Inductance: $16 \times L$
Current: I

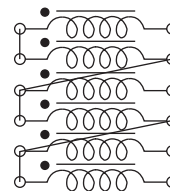


Figure 4

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

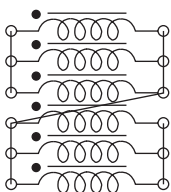


Figure 5

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

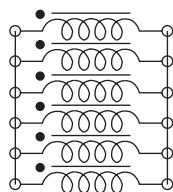
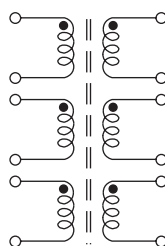


Figure 6

Inductance: L
Current: $6 \times I$

Transformer:



Basic Diagram

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

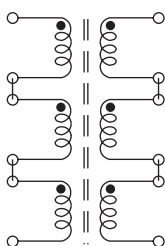


Figure 1

Turns Ratio:
 $1:1$

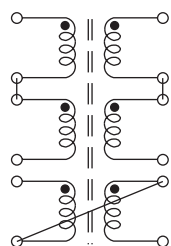


Figure 2

Turns Ratio:
 $1:1:1$

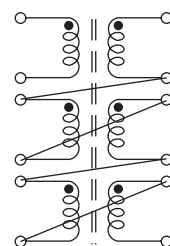


Figure 3

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

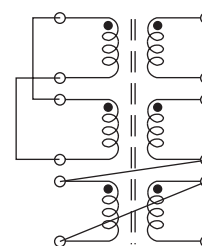


Figure 4

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

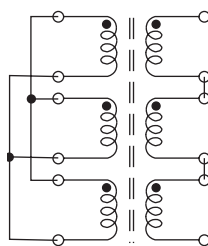


Figure 5

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

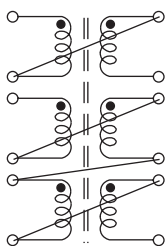


Figure 6

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

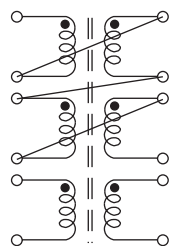


Figure 7

Turns Ratio:
 $4:1:1$

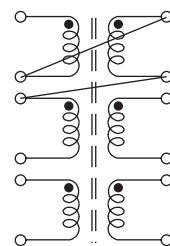


Figure 8

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

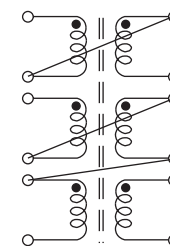


Figure 9

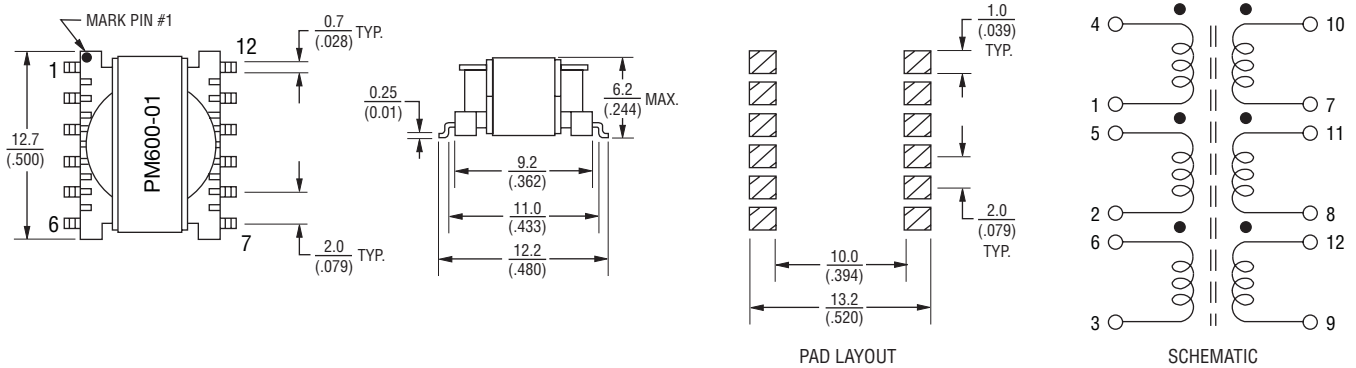
Turns Ratio:
 $2:3$ or $3:2$

PM600/PM610/PM620 Series - SMD Inductor/Transformer

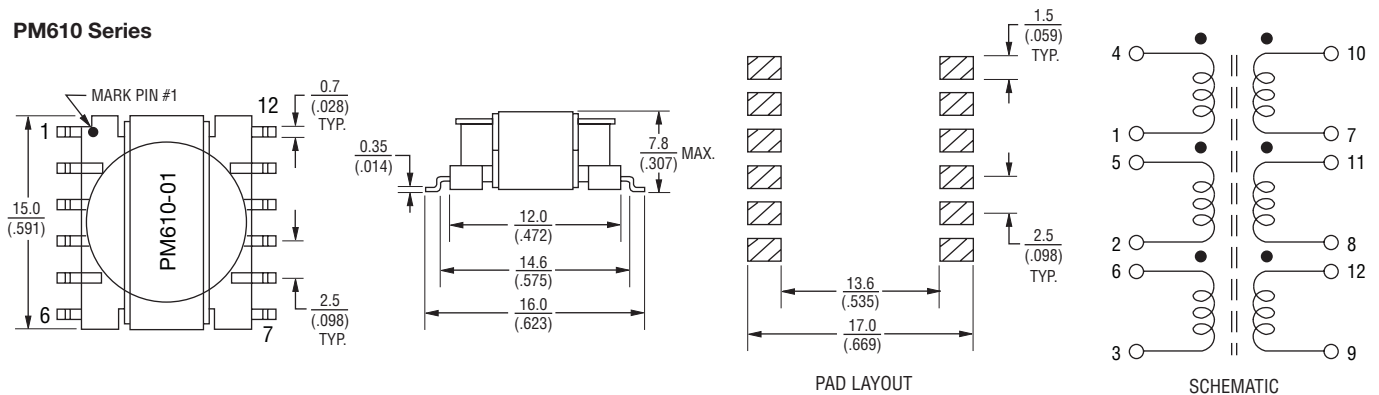
BOURNS®

Product Dimensions

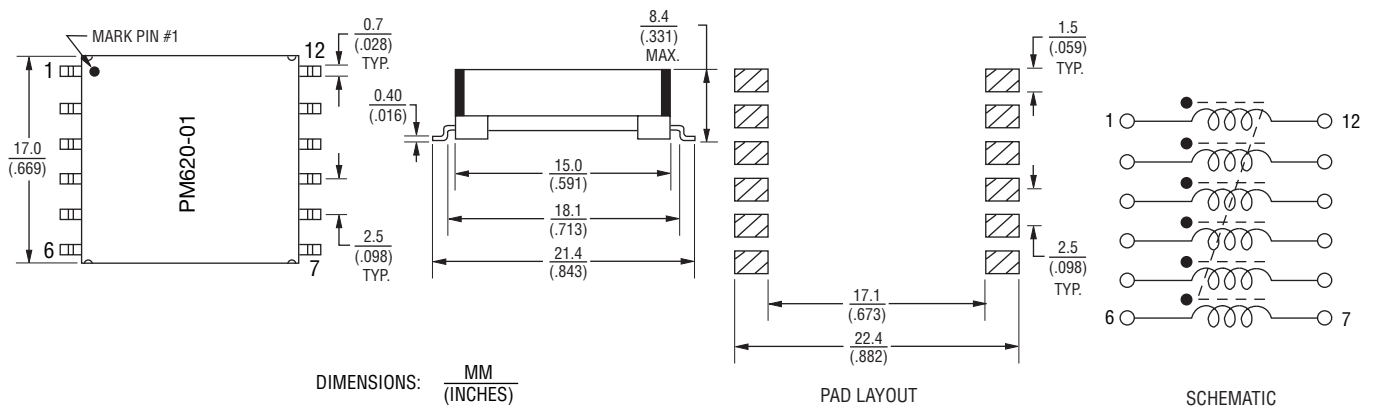
PM600 Series



PM610 Series



PM620 Series



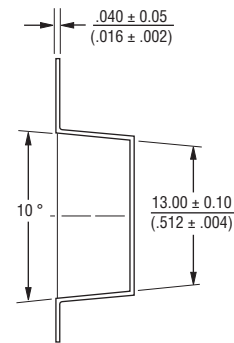
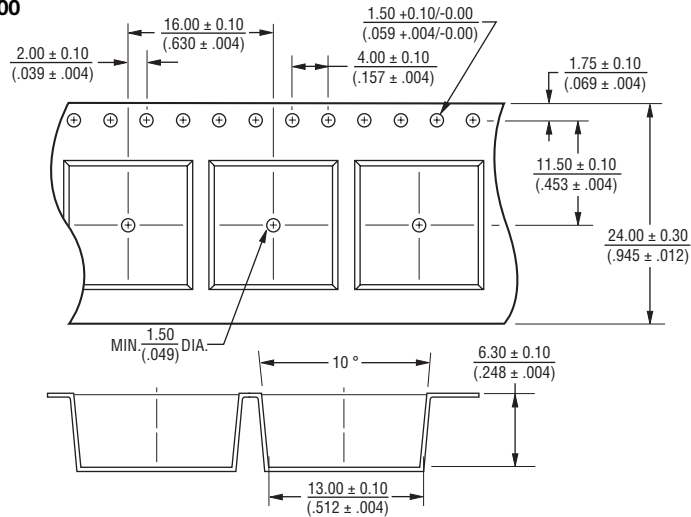
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

PM600/PM610/PM620 Series - SMD Inductor/Transformer

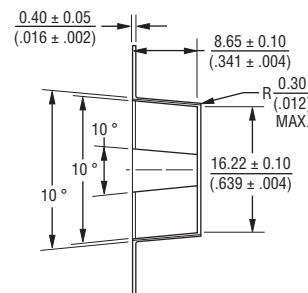
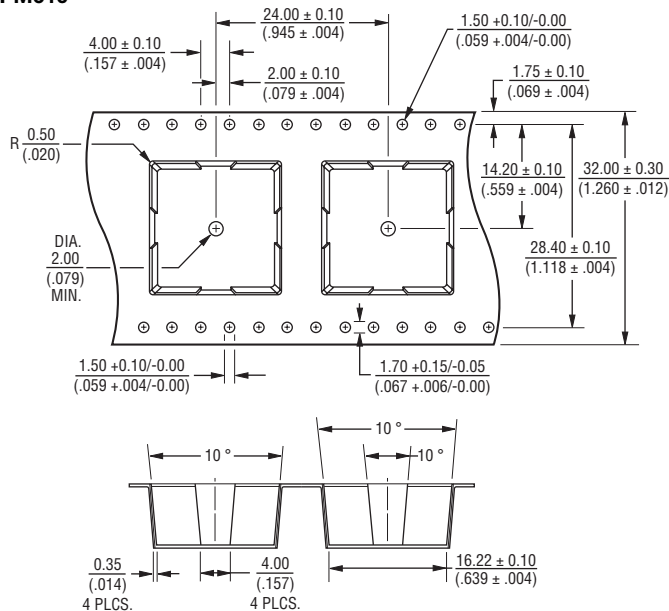
BOURNS®

Packaging Specifications

PM600



PM610



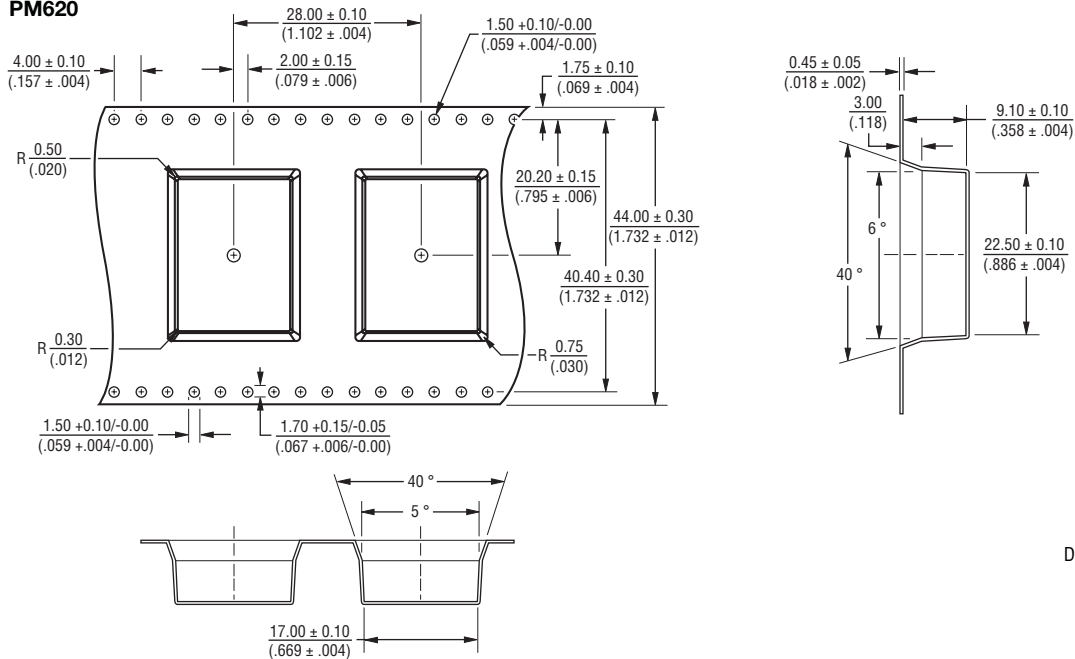
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

PM600/PM610/PM620 Series - SMD Inductor/Transformer

BOURNS®

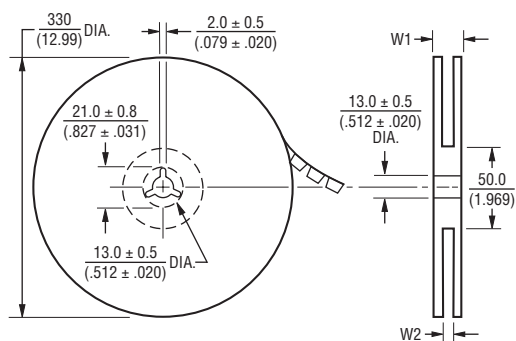
Packaging Specifications (Continued)

PM620

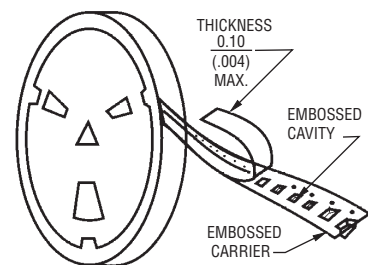


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

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



	W1	W2
PM600	30.4 (1.197)	26.0 (1.024)
PM610	38.4 (1.512)	34.0 (1.339)
PM620	50.4 (1.984)	46.0 (1.811)



REV. 06/08

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