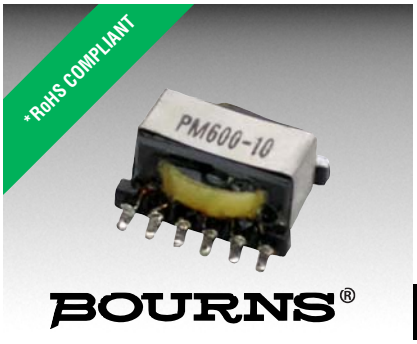


BOURNS®

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 (µH)	Inductance 100 KHz Tol. (%)	DCR (Ω) Max.	Isat (A)	Irms (A)	<1> ET (VmS) Based on 40 °C Rise (260 KHz)	<1> ET (VmS) Based on Core Saturation
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

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

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

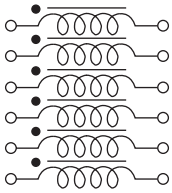
Materials

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

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Typical Configurations

Inductor:



Basic Diagram
Inductance: L
Current: I

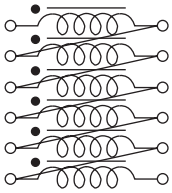


Figure 1
Inductance: 36 x L
Current: I

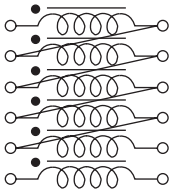


Figure 2
Inductance: 25 x L
Current: I

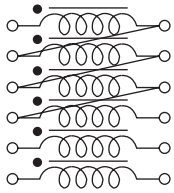


Figure 3
Inductance: 16 x L
Current: I

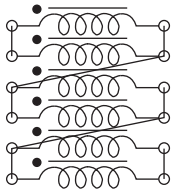


Figure 4
Inductance: 9 x L
Current: 2 x I

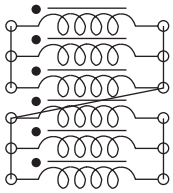


Figure 5
Inductance: 4 x L
Current: 3 x I

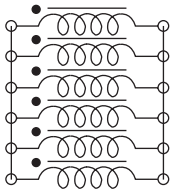
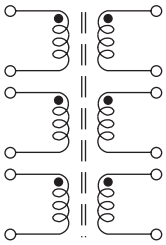


Figure 6
Inductance: L
Current: 6 x I

Transformer:



Basic Diagram
Turns Ratio:
1:1:1:1:1:1

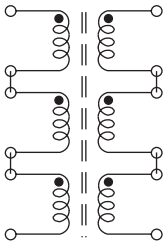


Figure 1
Turns Ratio:
1:1

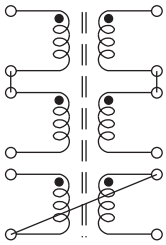


Figure 2
Turns Ratio:
1:1:1

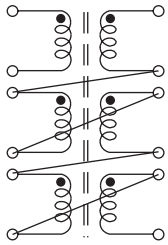


Figure 3
Turns Ratio:
1:5 or 5:1

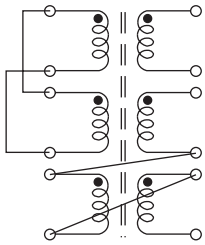


Figure 4
Turns Ratio:
1:4 or 4:1

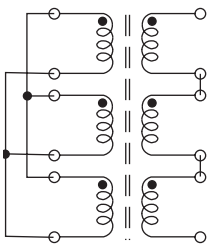


Figure 5
Turns Ratio:
1:3 or 3:1

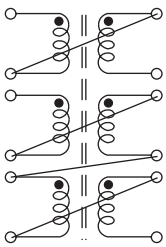


Figure 6
Turns Ratio:
1:2 or 2:1

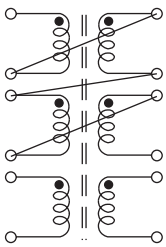


Figure 7
Turns Ratio:
4:1:1

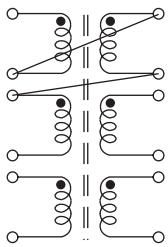


Figure 8
Turns Ratio:
3:1:1:1

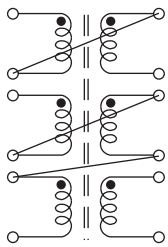
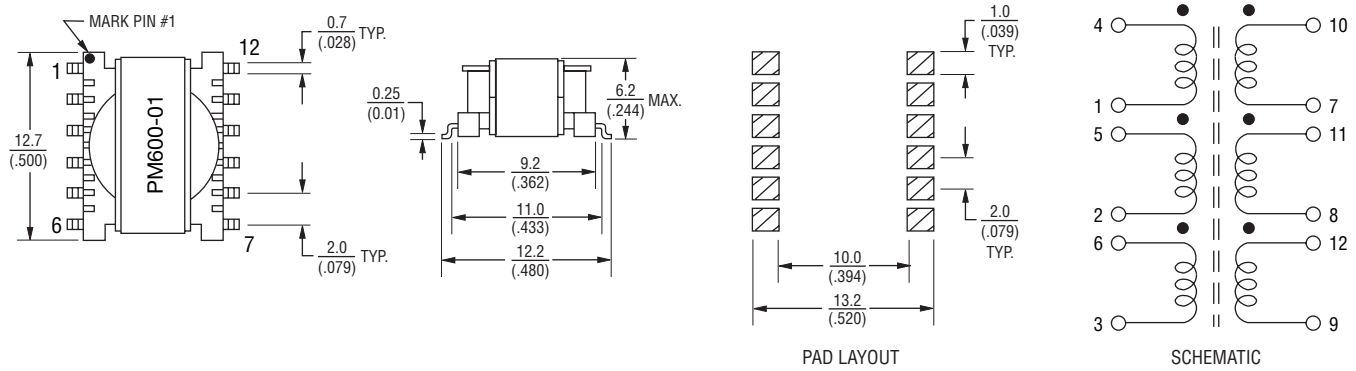


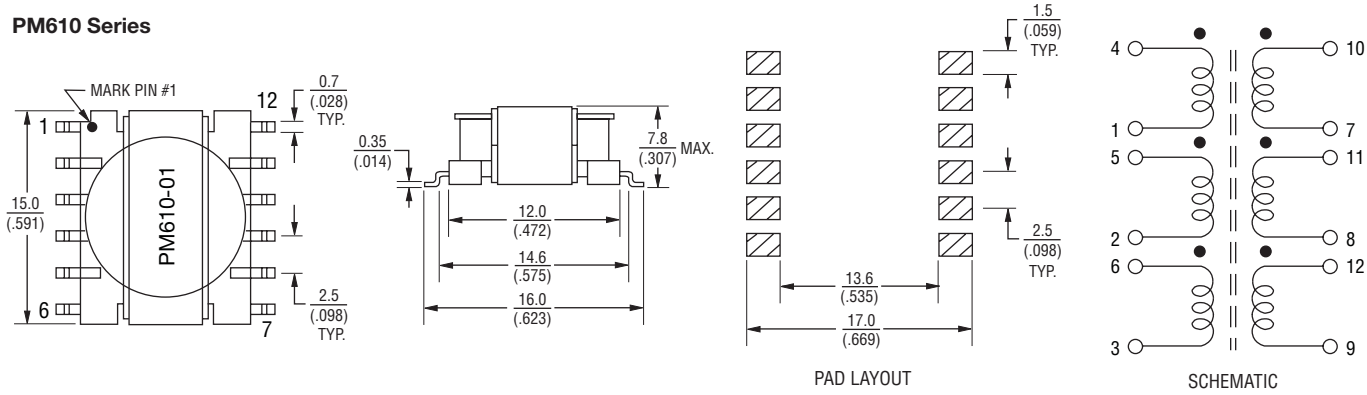
Figure 9
Turns Ratio:
2:3 or 3:2

Product Dimensions

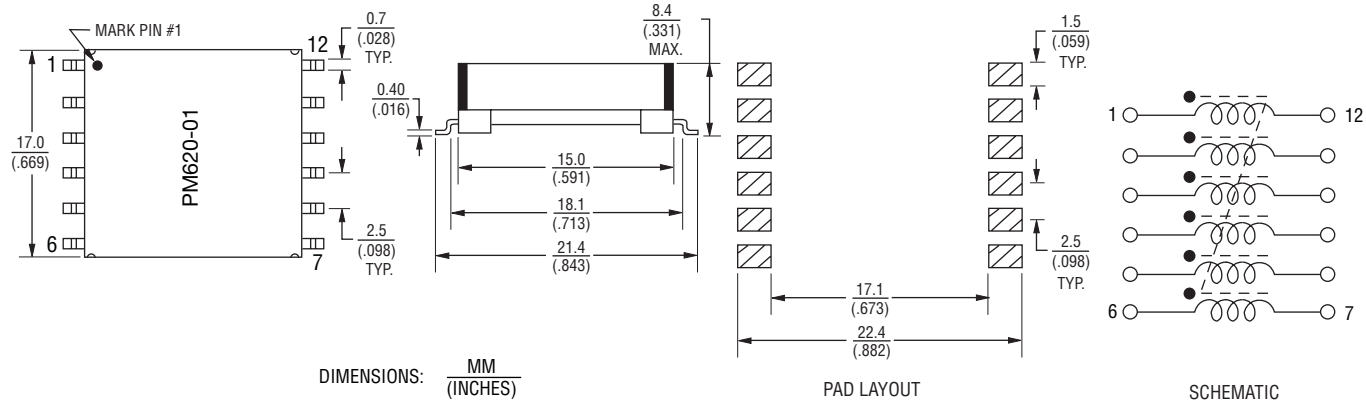
PM600 Series



PM610 Series



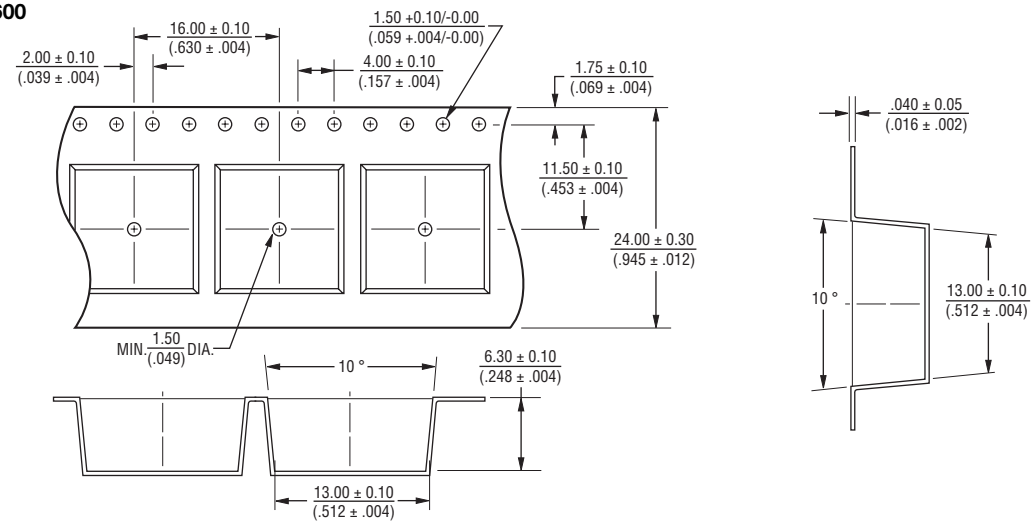
PM620 Series



DIMENSIONS: MM / (INCHES)

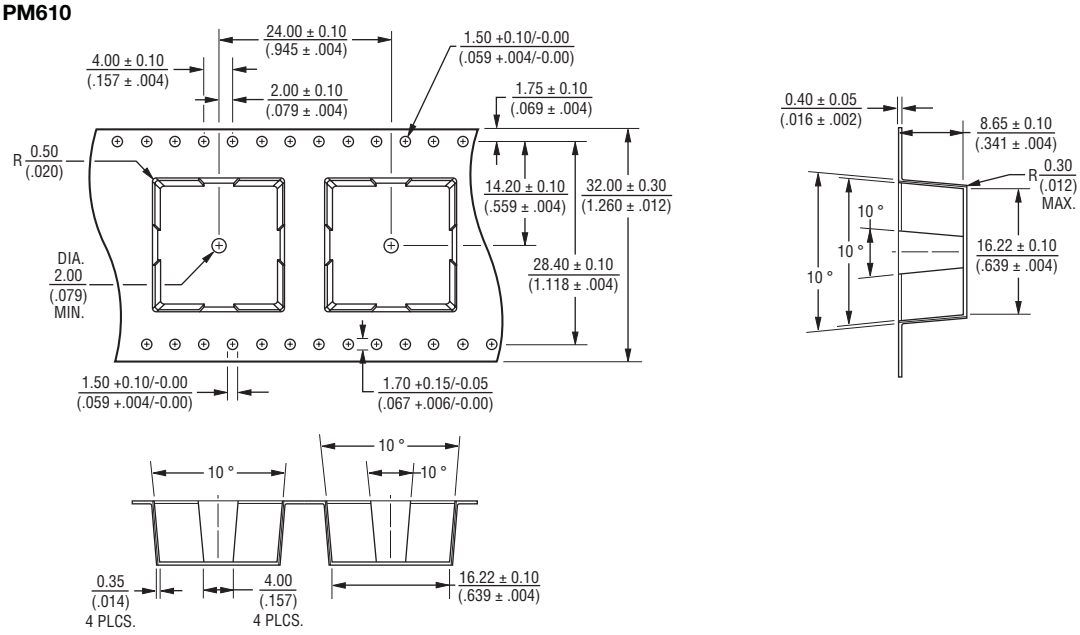
Packaging Specifications

PM600



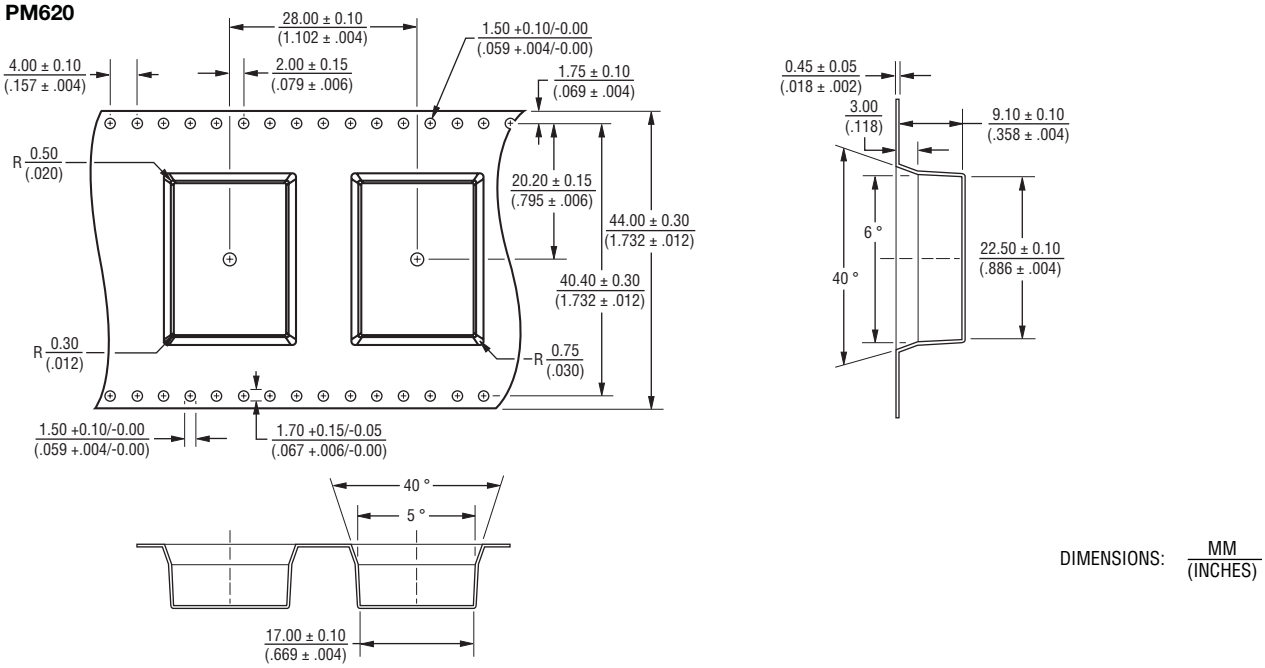
DIMENSIONS: MM / (INCHES)

PM610



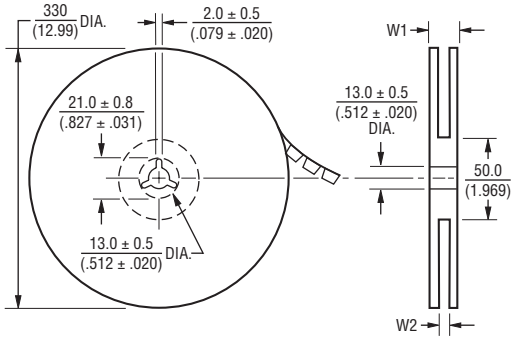
Packaging Specifications (Continued)

PM620

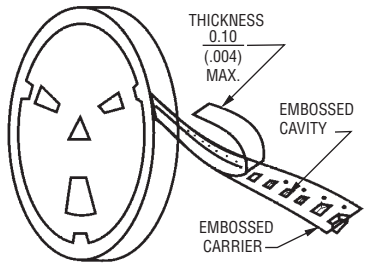


DIMENSIONS: MM / (INCHES)

<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