

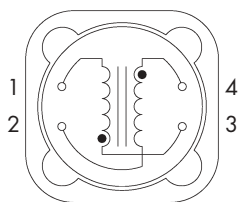
FEATURES

- 1.0μH to 400μH¹
- Up to 12.3A IDC
- Bobbin Format
- Dual Winding
- Surface Mounting
- Integral EMI Shield
- Compact Size
- Tape and Reel Packaging

DESCRIPTION

The 4800 series is a range of dual wound inductors offering flexible options. Windings can be connected in series or parallel to create a wide range of inductance combinations. They can also be used as common mode chokes or 1:1 transformers with the secondary winding used as a feedback winding in switched mode power supplies.

PIN CONNECTIONS (TOP VIEW)



3 & 1 = Primary Winding
4 & 2 = Secondary Winding

- 1 When connecting windings in series, inductance will be 4 times the nominal figure shown.
- 2 Specifications typical at TA=25°C
- 3 If current is flowing in both windings the maximum DC current occurs when either the inductance falls to 85% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

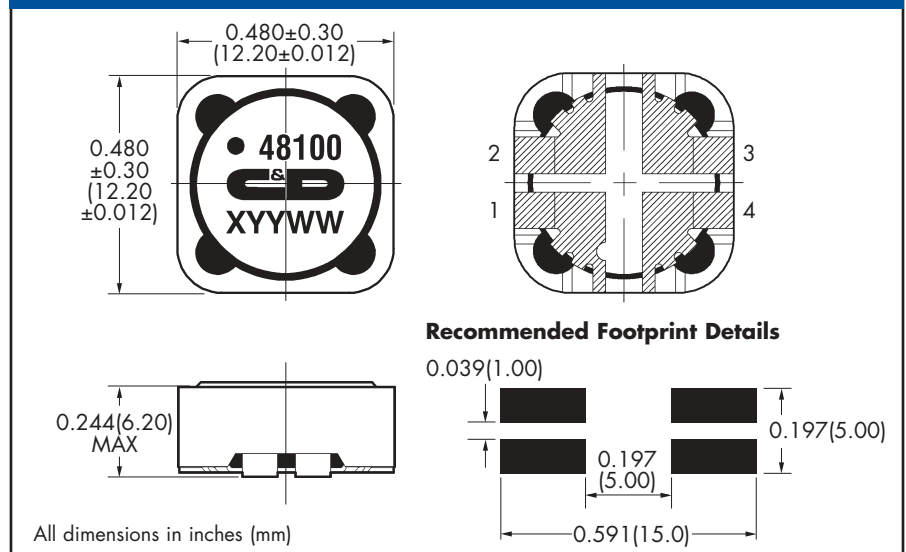
SELECTION GUIDE²

Order Code	Nominal Inductance ¹	Inductance Range	DC Current Continuous ³	DC Resistance
	μH 10kHz, 100mV 1&3, 2&4	μH 10kHz, 100mV 1&3, 2&4	A MAX 1&2 S/C to 3&4 S/C	mΩ MAX 1&3, 2&4
481R0	1.0	0.66 - 1.11	12.3	9.00
482R2	2.2	1.64 - 2.73	8.30	13.5
483R3	3.3	2.29 - 3.82	6.80	19.1
484R7	4.7	4.18 - 6.27	5.70	29.4
486R8	6.8	5.22 - 7.83	4.70	39.9
48100	10	7.65 - 11.5	3.90	61.4
48150	15	12.2 - 18.2	3.20	77.4
48220	22	17.7 - 26.6	2.60	119
48330	33	26.7 - 40.1	2.10	184
48470	47	37.6 - 56.4	1.80	274
48680	68	53.8 - 80.7	1.50	409
48101	100	81.3 - 122	1.23	503

ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 125°C

MECHANICAL DIMENSIONS



PACKAGE DETAILS

Order Code	TYP Weight (g)	Packaging Style
48XXX	3.1	Tape & Reel

REEL DIMENSIONS (SEE FIG.1)

Order Code	Reel Quantity	Reel Outline Dimensions			
		N	W1	W2	W3
48XXX	600	2.362 (60.0)	0.961 (24.4)	1.197 (30.4)	0.914-1.079 (23.9-27.4)

All dimensions in inches(mm).
Controlling dimension in mm.

TAPE DIMENSIONS (SEE FIG.2)

Order Code	Tape Outline Dimensions						
	A0	B0	E2	F	K0	P1	W
48XXX	0.496 (12.6)	0.496 (12.6)	0.876 (22.3)	0.453 (11.5)	0.252 (6.4)	0.630 (16.0)	0.945 (24.0)

All dimensions in inches(mm).
Controlling dimension in mm.

TAPE & REEL SPECIFICATIONS

- Tape and reel specifications shall conform with standards IEC 60286-3 & EIA-481-C
- Peel force and speed of cover tape; 0.1-1.3N @300±10mm/MIN, the angle between the cover tape during peel-off and the direction of unreeling shall be 165-180°.
- The break force of the cover tape shall be 10N MIN.
- The carrier tape leader section shall include a minimum 100mm length of empty carrier tape sealed by the cover tape (see FIG.1).
- The maximum number of missing components shall be one or 0.1%, whichever is greater. In no case shall there be two or more consecutive components missing.
- The trailer section shall consist entirely of empty carrier tape sealed by the cover tape.
- The carrier tape shall be released from the reel hub as the last portion of the carrier tape unwinds from the reel.
- Sprocket hole pitch tolerance over any 10 pitches ±0.2mm.
- Carrier tape camber shall not exceed 1mm/250mm in either direction.

FIG.1 REEL - OUTLINE DIMENSIONS

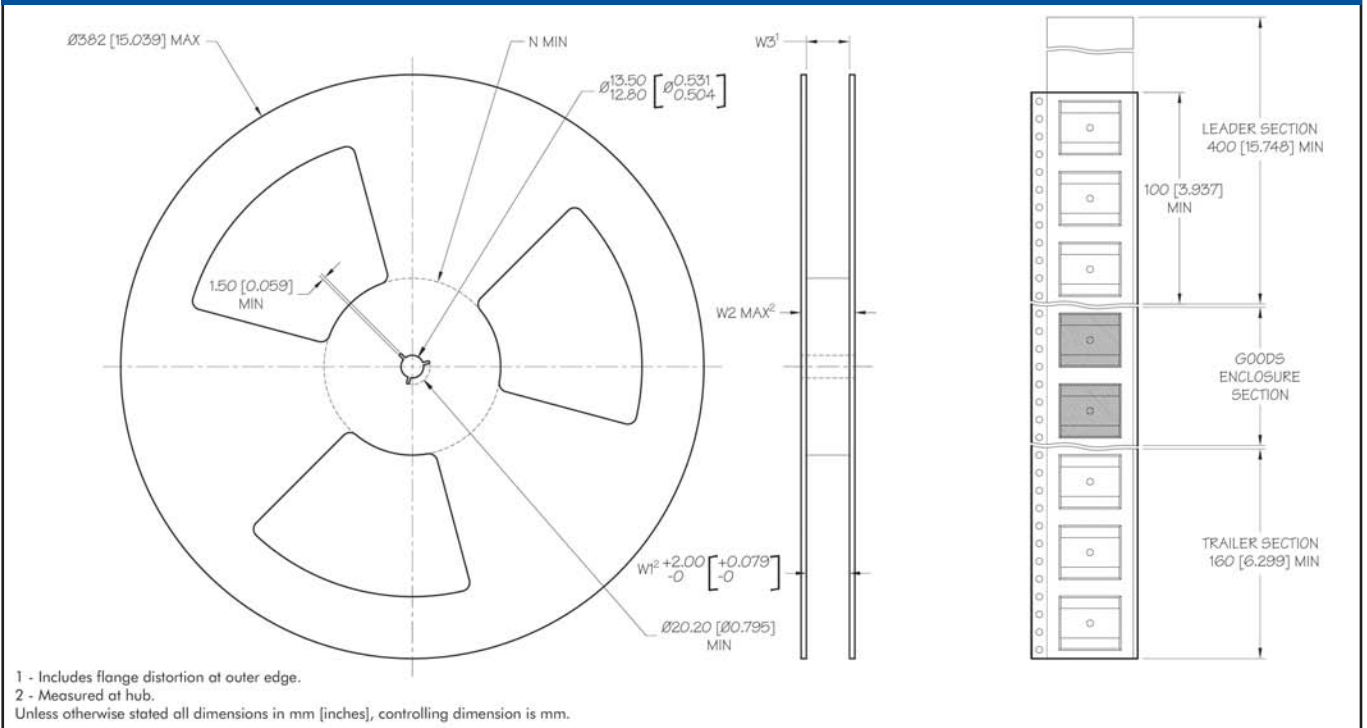
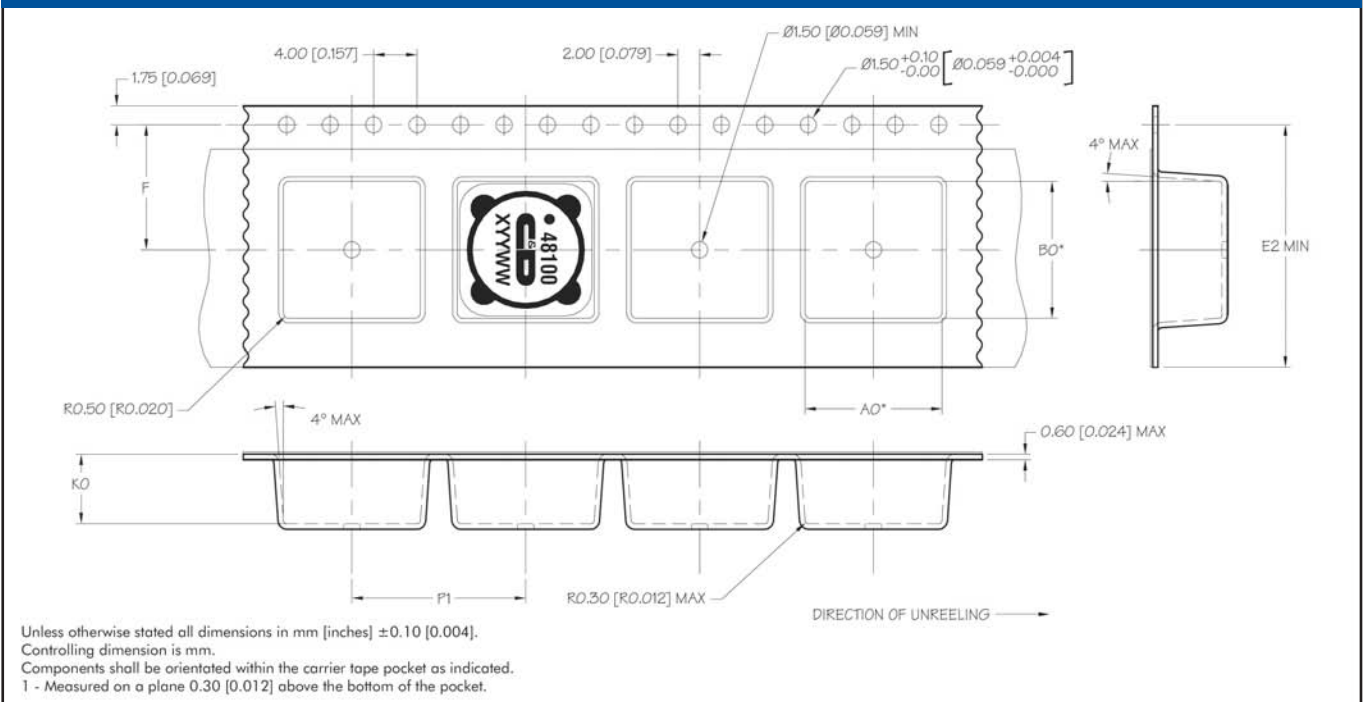


FIG.2 TAPE - OUTLINE DIMENSIONS



- 1 When connecting windings in series, inductance will be 4 times the nominal figure shown.
- 2 Specifications typical at TA=25°C
- 3 If current is flowing in both windings the maximum DC current occurs when either the inductance falls to 85% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

C&D Technologies (NCL) Ltd
Tanners Drive, Blakelands North
Milton Keynes MK14 5BU, England
Tel: +44 (0)1908 615232
Fax: +44 (0)1908 617545
email: info@cdtechno-ncl.com

C&D Technologies Inc.
3400 E Britannia Drive, Tucson,
Arizona 85706, USA
Tel: +1 (800) 547-2537
Fax: +1 (520) 741-4598
email: sales@cdtechno.com

C&D Technologies (NCL) Limited reserve the right to alter or improve the specification, internal design or manufacturing process at any time, without notice. Please check with your supplier or visit our web site to ensure that you have the current and complete specification for your product before use.

© C&D Technologies (NCL) Limited 2004 NMP 4800.1

No part of this publication may be copied, transmitted or stored in a retrieval system or reproduced in any way including, but not limited to, photography, photocopy, magnetic or other recording means, without prior written permission from C&D Technologies (NCL) Limited.

Instructions for use are available from: www.cdpoweronline.com

This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.