

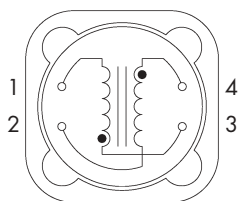
**FEATURES**

- 1.0μH to 400μH<sup>1</sup>
- Up to 9.5A IDC
- Bobbin Format
- Dual Winding
- Surface Mounting
- Integral EMI Shield
- Compact Size
- Tape and Reel Packaging

**DESCRIPTION**

The 4700 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.

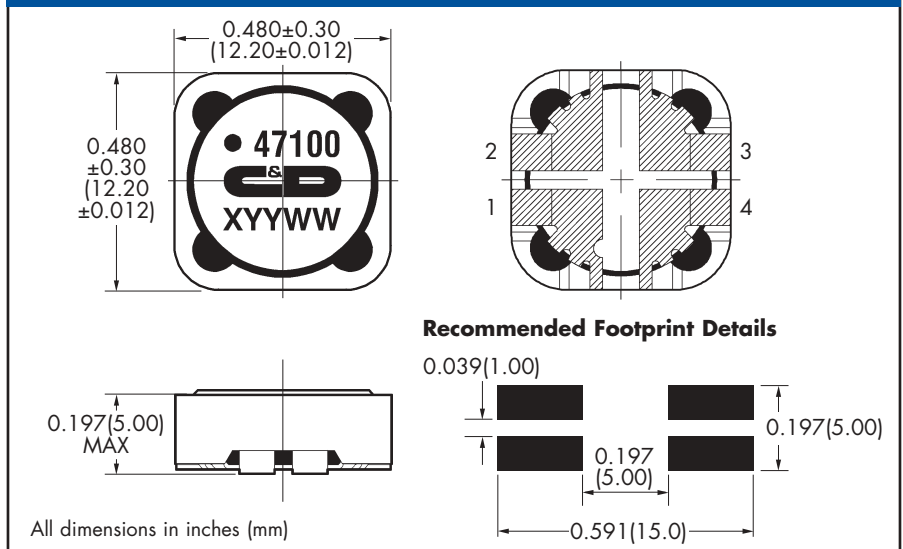
**SELECTION GUIDE<sup>2</sup>**

Order Code	Nominal Inductance <sup>1</sup>	Inductance Range	DC Current Continuous <sup>3</sup>	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
<b>471R0</b>	1.0	0.83 - 1.39	9.50	8.9
<b>472R2</b>	2.2	1.38 - 2.30	6.80	13.7
<b>473R3</b>	3.3	2.87 - 4.79	5.50	23.3
<b>474R7</b>	4.7	4.08 - 6.12	4.60	32.4
<b>476R8</b>	6.8	5.24 - 7.86	3.90	44.8
<b>47100</b>	10	8.00 - 12.0	3.20	70.2
<b>47150</b>	15	11.3 - 17.0	2.60	106
<b>47220</b>	22	17.4 - 26.1	2.10	165
<b>47330</b>	33	27.6 - 41.4	1.80	207
<b>47470</b>	47	36.7 - 55.1	1.47	298
<b>47680</b>	68	54.9 - 82.3	1.22	456
<b>47101</b>	100	81.4 - 122	1.01	686

**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
47XXX	2.5	Tape & Reel

**REEL DIMENSIONS (SEE FIG.1)**

Order Code	Reel Quantity	Reel Outline Dimensions			
		N	W1	W2	W3
47XXX	750	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)**

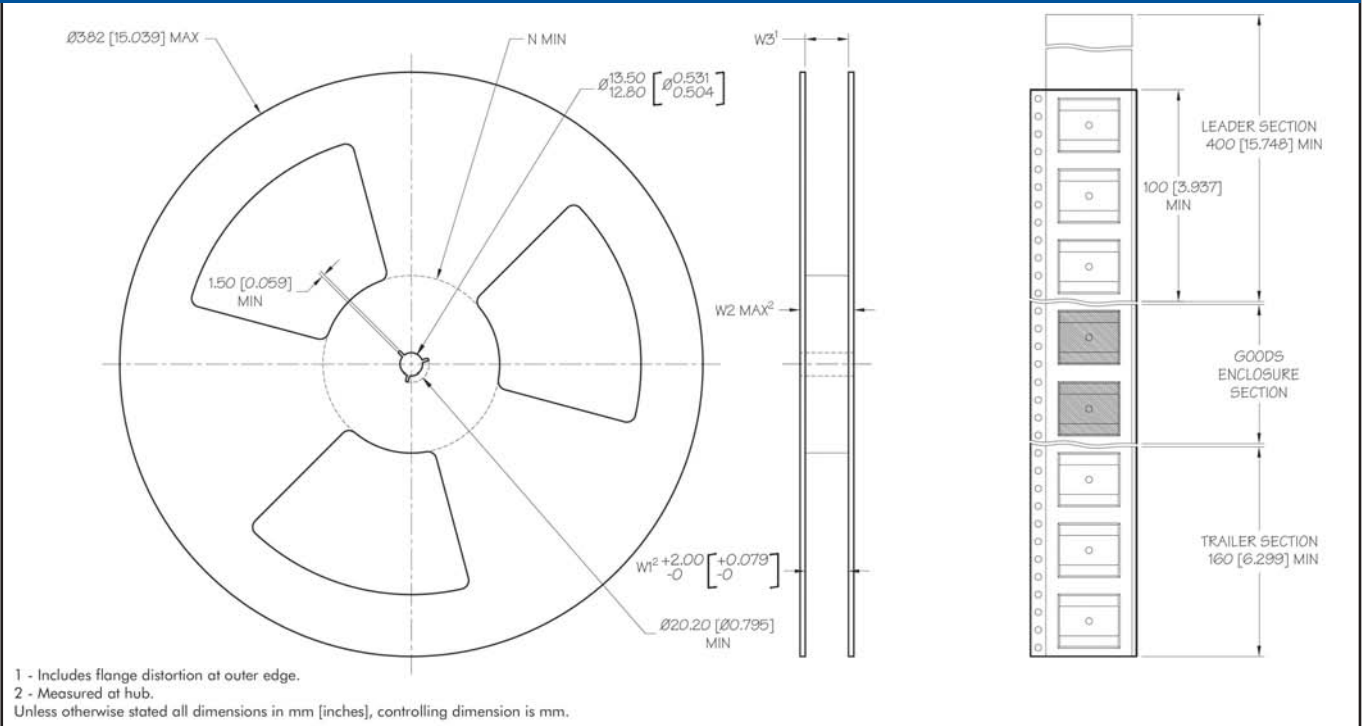
Order Code	Tape Outline Dimensions						
	A0	B0	E2	F	K0	P1	W
47XXX	0.496 (12.6)	0.496 (12.6)	0.876 (22.3)	0.453 (11.5)	0.205 (5.2)	0.630 (16.0)	0.945 (24.0)

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

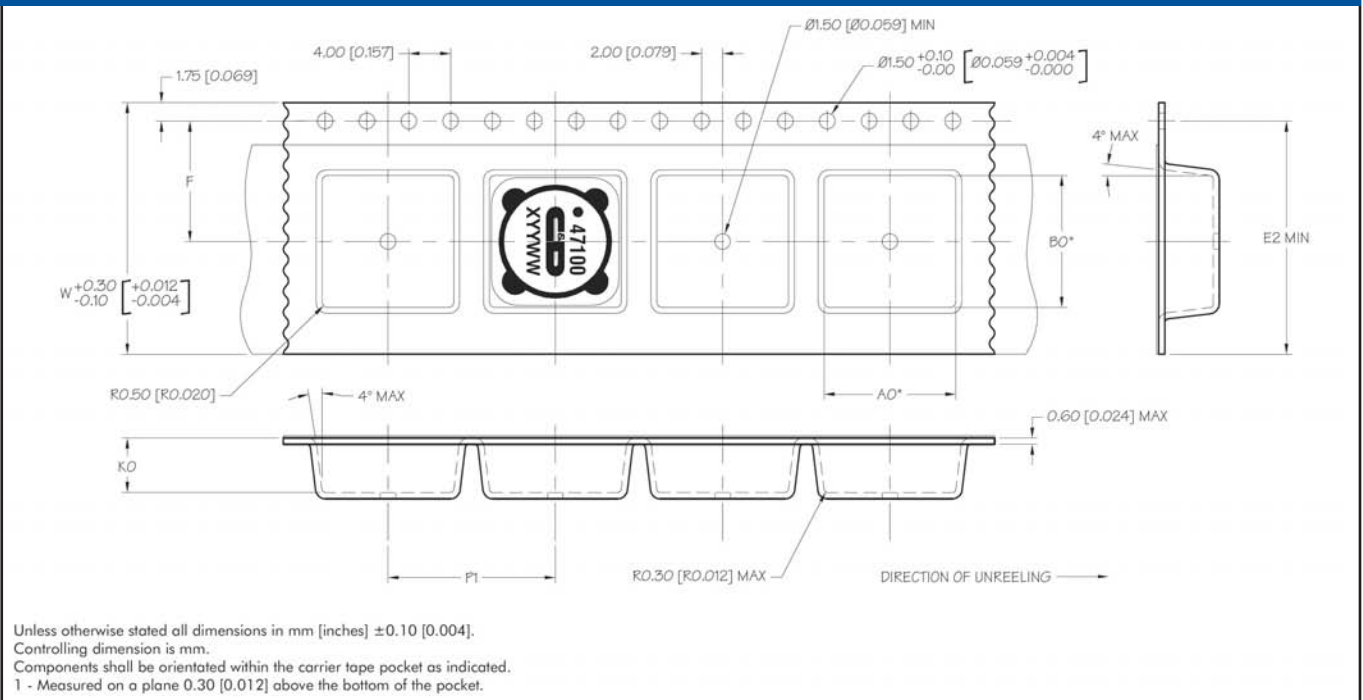
**TAPE & REEL SPECIFICATIONS**

- 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.

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