4900 Series

Shielded Dual Winding Surface Mount Inductors



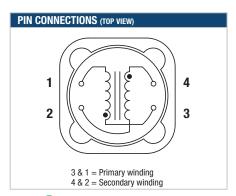


FEATURES

- RoHS compliant
- 2.2µH to 880µH¹
- Up to 9.5A loc
- Bobbin format
- Dual winding
- Surface mount
- Integral EMI shield
- Compact size
- Tape and reel packaging
- No voltage breakdown at 500V_{DC}
- J-STD-020C reflow
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

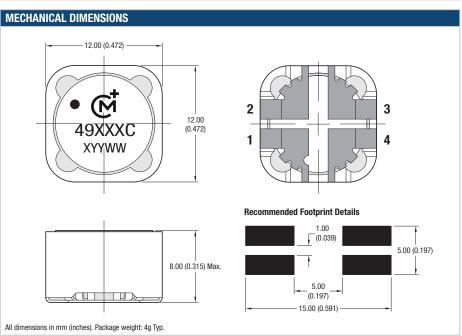
The 4900 series is a range of dual wound inductors offering flexible options. Windings have a 1:1 ratio and can be connected in series or parallel to create a wide range of inductance combinations. The secondary winding could be used as a feedback winding in switched mode power supplies.







SELECTION GUIDE				
Order Code	Inductance ¹ (10kHz, 100mVac) 1&3, 2&4	Inductance Range (10kHz, 100mVac) 1&3, 2&4	DC Current ² (parallel connection)	DC Resistance
	Nom.	Min Max.	Max.	Max.
	μH	μН	Α	mΩ
492R2C	2.2	1.77 - 2.65	9.50	12.6
493R3C	3.3	2.47 - 3.70	7.80	14.9
494R7C	4.7	3.29 - 4.93	6.50	17.1
496R8C	6.8	5.27 - 7.91	5.40	27.0
49100C	10	7.70 - 11.6	4.50	41.0
49150C	15	10.6 - 16.0	3.70	53.0
49220C	22	15.9 - 23.8	3.00	81.0
49330C	33	24.5 - 36.8	2.50	128
49470C	47	35.1 - 52.6	2.10	191
49680C	68	50.8 - 76.2	1.71	233
49101C	100	73.6 - 110	1.41	343
49151C	150	111 - 166	1.15	529
49221C	220	167 - 251	0.95	805



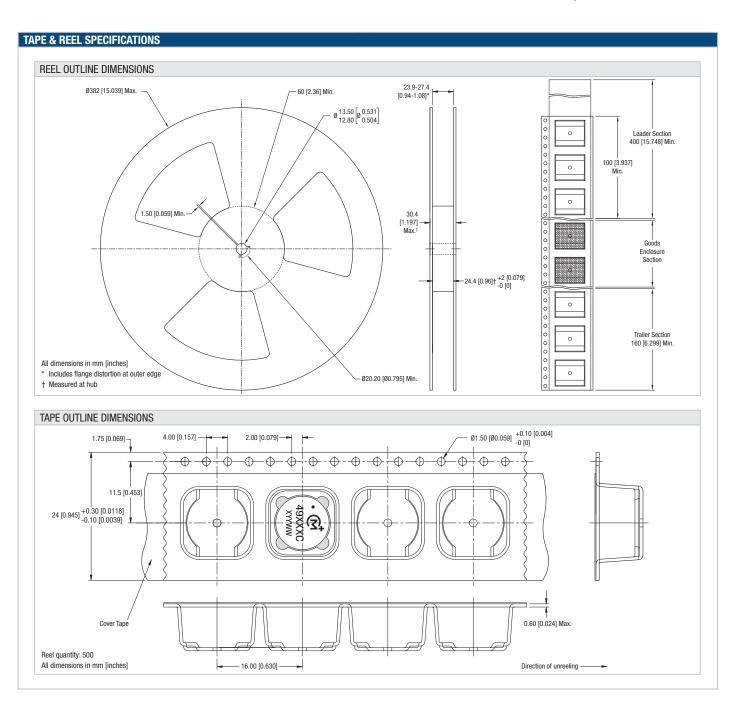
ABSOLUTE MAXIMUM RATINGS			
Isolation voltage (flash tested for 1 second), pins 3 & 4	500Vpc		
Operating free air temperature range	-40°C to 85°C		
Storage temperature range	-40°C to 125°C		

SOLDERING INFORMATION ³			
Peak reflow temperature	245°C		
Pin finish	Tin		

Specifications typical at $T_{\rm A} = 25^{\circ}{\rm C}$

- 1 When connecting windings in series, inductance will be 4 times the nominal figure shown.
- 2 If current is flowing in both windings, the maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- 3 For further information, please visit www.murata-ps.com/rohs

Shielded Dual Winding Surface Mount Inductors





4900 Series

Shielded Dual Winding Surface Mount Inductors

DISCLAIMER

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

Particularly for safety-critical and/or life-critical applications, i.e. applications that may directly endanger or cause the loss of life, inflict bodily harm and/or loss or severe damage to equipment/property, and severely harm the environment, a prior explicit written approval from Murata is strictly required. Any use of Murata standard products for any safety-critical, life-critical or any related applications without any prior explicit written approval from Murata shall be deemed unauthorised use.

These applications include but are not limited to:

- Aircraft equipment
- Aerospace equipment
- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

Murata makes no express or implied warranty, representation, or guarantee of suitability, fitness for any particular use/purpose and/or compatibility with any application or device of the buyer, nor does Murata assume any liability whatsoever arising out of unauthorised use of any Murata product for the application of the buyer. The suitability, fitness for any particular use/purpose and/or compatibility of Murata product with any application or device of the buyer remain to be the responsibility and liability of the buyer.

Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm, and take appropriate remedial actions. Buyer will fully indemnify and hold Murata, its affiliated companies, and its representatives harmless against any damages arising out of unauthorised use of any Murata products in any safety-critical and/or life-critical applications.

Remark: Murata in this section refers to Murata Manufacturing Company and its affiliated companies worldwide including, but not limited to, Murata Power Solutions.

This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy:

Refer to: https://www.murata.com/en-eu/products/power/requirements

Murata Power Solutions (Milton Keynes) Ltd. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein on timply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

© 2021 Murata Power Solutions (Milton Keynes) Ltd.