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Murata Power Solutions

1400 Series

Bobbin Type Inductors



FEATURES

- RoHS compliant
- Radial format
- -40°C to 85°C operating temperature
- Up to 13A I_{DC}
- 10µH to 22mH
- Low DC resistance
- Fully tinned leads
- PCB mounting hole
- Low temperature dependence
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

DESCRIPTION

The 1400 Series is suitable for many power supply and other general purpose filtering applications. The use of a non-magnetic screw will ensure mechanical stability.

RoHS COMPLIANT

For full details go to
www.murata-ps.com/rohs

SELECTION GUIDE

Order Code	Inductance, (1kHz, 0.1VAC)	DC Current[1]	DC Resistance	Q at f kHz		SRF	Mechanical Dimensions					Footprint	
	±10%	Max.	Max.	Nom.		Nom.	a	b	c	d	Øe	f	Øg
	µH	A	Ω	Q	f	MHz	mm					mm	
1410313C	10 ±15%	13	0.009	54	50	20.7	27.0	24.4	14.0	1.30	5.5	23.9	2.6
1415312C	15 ±15%	12	0.009	42	50	12.7	27.0	24.4	14.0	1.30	5.5	23.9	2.6
1422311C	22 ±15%	11	0.014	64	100	9.3	27.0	24.4	14.0	1.30	5.5	23.9	2.6
1433393C	33 ±15%	9.3	0.017	27	50	9.1	27.0	24.4	14.0	1.30	5.5	23.9	2.6
1447383C	47 ±15%	8.3	0.019	40	100	6.0	27.0	24.4	18.5	1.30	5.5	23.9	2.6
1447385C	47 ±15%	8.5	0.021	33	100	6.7	26.8	24.4	14.0	1.20	5.5	23.8	2.4
1468362C	68 ±15%	6.2	0.032	32	100	5.3	26.5	24.4	14.0	1.08	5.5	23.7	2.1
1468373C	68 ±15%	7.3	0.025	45	100	5.3	27.0	24.4	18.5	1.30	5.5	23.9	2.6
1410454C	100	5.4	0.046	24	100	4.6	26.4	24.4	14.0	1.02	5.5	23.6	2.0
1410460C	100	6.0	0.033	37	100	3.9	26.8	24.4	18.5	1.20	5.5	23.8	2.4
1410478C	100	7.8	0.040	34	50	3.3	32.4	29.8	21.8	1.30	5.1	29.3	2.6
1415440C	150	4.0	0.069	24	50	3.4	26.2	24.4	14.0	0.90	5.5	23.5	1.8
1415449C	150	4.9	0.055	34	50	2.9	26.4	24.4	18.5	1.02	5.5	23.6	2.0
1415465C	150	6.5	0.042	46	100	2.4	32.2	29.8	21.8	1.20	5.1	29.2	2.4
1422435C	220	3.5	0.096	22	50	2.8	26.1	24.4	14.0	0.85	5.5	23.5	1.7
1422441C	220	4.1	0.073	33	100	2.3	26.3	24.4	18.5	0.97	5.5	23.6	1.9
1422455C	220	5.5	0.062	30	50	2.2	32.1	29.8	21.8	1.14	5.1	29.1	2.2
1430430C	300	3.0	0.140	26	50	2.6	25.9	24.4	14.0	0.75	5.5	23.4	1.5
1430433C	300	3.3	0.100	37	50	2.2	26.2	24.4	18.5	0.90	5.5	23.5	1.8
1430450C	300	5.0	0.080	28	50	1.7	31.8	29.8	21.8	1.02	5.1	29.0	2.0
1433428C	330	2.8	0.150	22	50	2.5	25.9	24.4	14.0	0.76	5.5	23.4	1.5
1433433C	330	3.3	0.120	29	50	2.0	26.2	24.4	18.5	0.90	5.5	23.5	1.8
1433445C	330	4.5	0.091	25	50	1.6	31.8	29.8	21.8	1.02	5.1	29.0	2.0
1447423C	470	2.3	0.250	34	50	2.0	25.7	24.4	14.0	0.67	5.5	23.3	1.3
1447427C	470	2.7	0.160	25	50	1.6	26.1	24.4	18.5	0.85	5.5	23.5	1.7
1447440C	470	4.0	0.125	24	50	1.4	31.7	29.8	21.8	0.97	5.1	29.0	1.9
1468420C	680	2.0	0.300	23	50	1.6	25.7	24.4	14.0	0.67	5.5	23.3	1.3
1468422C	680	2.2	0.226	28	50	1.3	25.9	24.4	18.5	0.75	5.5	23.4	1.5
1468431C	680	3.1	0.173	60	10	1.0	31.6	29.8	21.8	0.90	5.1	28.9	1.8
1410516C	1.0mH	1.6	0.460	30	50	1.4	25.6	24.4	14.0	0.60	5.5	23.2	1.2
1410517C	1.0mH	1.7	0.336	35	50	1.2	25.7	24.4	18.5	0.67	5.5	23.3	1.3
1410524C	1.0mH	2.4	0.277	33	50	1.0	31.4	29.8	21.8	0.79	5.1	28.8	1.5
1415513C	1.5mH	1.3	0.680	34	50	1.0	25.5	24.4	14.0	0.54	5.5	23.1	1.0
1415514C	1.5mH	1.4	0.550	47	50	0.8	25.6	24.4	18.5	0.60	5.5	23.2	1.2
1415517C	1.5mH	1.7	0.374	28	50	0.7	31.3	29.8	21.8	0.75	5.1	28.8	1.5
1422509C	2.2mH	0.9	1.000	43	50	0.9	25.3	24.4	14.0	0.48	5.5	23.1	0.9
1422512C	2.2mH	1.2	0.700	33	50	0.7	25.6	24.4	18.5	0.60	5.5	23.2	1.2
1422514C	2.2mH	1.4	0.622	33	50	0.6	31.1	29.8	21.8	0.67	5.1	28.7	1.3
1433507C	3.3mH	0.7	1.428	45	50	0.8	25.2	24.4	14.0	0.43	5.5	23.0	0.8
1433510C	3.3mH	1.0	1.992	20	50	0.7	25.5	24.4	18.5	0.54	5.5	23.1	1.0
1433512C	3.3mH	1.2	0.930	20	50	0.5	31.0	29.8	21.8	0.60	5.1	28.6	1.2
1447506C	4.7mH	0.6	2.200	60	50	0.6	25.2	24.4	14.0	0.39	5.5	23.0	0.7
1447508C	4.7mH	0.8	1.600	65	50	0.5	25.3	24.4	18.5	0.48	5.5	23.1	0.9
1447509C	4.7mH	0.9	1.400	57	10	0.5	30.9	29.8	21.8	0.54	5.1	28.5	1.0
1468505C	6.8mH	0.5	2.880	50	50	0.5	25.2	24.4	14.0	0.39	5.5	23.0	0.7
1468507C	6.8mH	0.7	2.300	47	50	0.4	25.2	24.4	18.5	0.43	5.5	23.0	0.8
1468508C	6.8mH	0.8	2.100	30	50	0.4	30.7	29.8	21.8	0.48	5.1	28.5	0.9
1410604C	10mH	0.4	4.340	51	50	0.4	25.1	24.4	14.0	0.34	5.5	22.9	0.6
1410605C	10mH	0.5	3.600	48	50	0.3	25.2	24.4	18.5	0.39	5.5	23.0	0.7
1410606C	10mH	0.6	2.600	48	50	0.2	30.9	29.8	21.8	0.54	5.1	28.5	1.0
1415604C	15mH	0.4	5.500	61	10	0.2	25.1	24.4	18.5	0.34	5.5	22.9	0.6
1415605C	15mH	0.5	3.740	55	10	0.2	30.6	29.8	21.8	0.43	5.1	28.4	0.8
1422604C	22mH	0.4	6.962	30	50	0.2	30.5	29.8	21.8	0.34	5.1	28.3	0.6

1 Maximum DC current occurs when either the inductance falls to 60% of its nominal value or when its temperature rise reaches 50°C, whichever is sooner.

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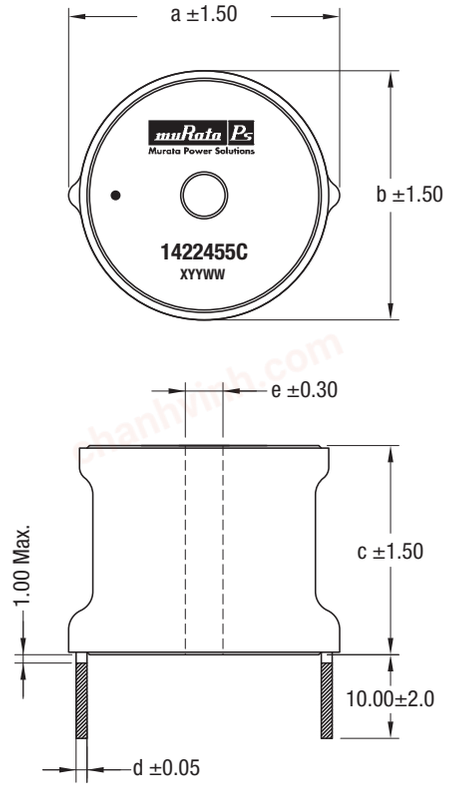
SOLDERING INFORMATION[2]	
Peak wave solder temperature	300°C for 10 seconds
Pin finish	Pure tin dip

ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-55°C to 125°C

All specifications typical at T_A=25°C
2 For further information, please visit www.murata-ps.com/rohs

PACKAGE SPECIFICATIONS

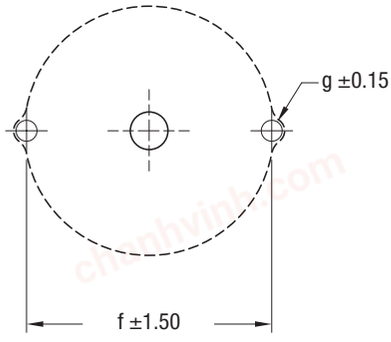
MECHANICAL DIMENSIONS



All dimensions in mm.
Dot indicates the innermost turn of the winding.

Package weight: 30-65g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm

PACKAGING DETAILS	
21.8mm height products	15 per carton
All other products	25 per carton

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