

Power Inductors - Wound



Steward's surface mount two terminal wound inductors provide a cost effective solution to designers who require a medium current surface mount device with inductance values up to 1000 μ H. Parts are available in both shielded and unshielded versions.

Features:

- Broad range of form factors • Economical • Rugged construction • Broad range of inductance values • Current capacities up to 1 amp
- High self resonant frequencies

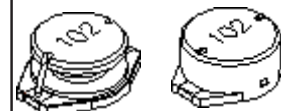
Applications:

- DC/DC converters • RF and wireless communication • Information technology equipment including; computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, keyless remote systems and low-voltage power supply modules • Use in L-C power filter configurations

Specifications:

- Agilent E4991A (1MHz-3GHz) or Agilent 8720ES (100KHz-20GHz) analyzers • HP16192A, HP16194A, Agilent 16193A, Intercontinental Microwave custom high frequency fixtures • HP16200 DC bias adapter or Tecnia bias T adapters • Philips PM2811 Digital DC powersupply • Ambient temp 23-25 Deg C • Board level components are rated up to 75 volts • Maximum current ratings are based on a temp of 40 Deg. C under continuous current load or 10% drop in inductance
- Ambient operating temperature range: -25 Deg. C to +85 Deg. C

STEWARD PART NUMBERING SYSTEM					
IP	1608	M	102	R	- M0
PRODUCT SERIES CODE	PART SIZE CODE	RATED CURRENT CODE	INDUCTANCE VALUE CODE	PACKAGING CODE	ADDITIONAL DESCRIPTION



Tolerance (M) = \pm 20% All IP inductors available in Sample kit

IP Inductors						IP Inductors					
PART NUMBER	Inductance (L) (μ H)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps	PART NUMBER	Inductance (L) (μ H)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP1608M102R-M0	1.00	No	130.00	0.05	2.9	IP2517K222R-M0	2.20	Yes	120.0	0.050	1.80
IP1608L222R-M0	2.20	No	90.00	0.07	2.4	IP2517J472R-M0	4.70	Yes	105.0	0.060	1.40
IP1608K472R-M0	4.70	No	50.00	0.09	1.5	IP2517J103R-M0	10.00	Yes	38.0	0.075	1.00
IP1608J103R-M0	10.00	No	35.00	0.16	1.1	IP2517G223R-M0	22.00	Yes	25.0	0.110	0.70
IP1608H223R-M0	22.00	No	20.00	0.37	0.8	IP2517E473R-M0	47.00	Yes	20.0	0.230	0.50
IP1608E473R-M0	47.00	No	14.00	0.64	0.5	IP2517C104R-M0	100.00	Yes	10.0	0.480	0.30
IP1608C104R-M0	100.00	No	9.00	1.27	0.3	IP2517A105R-M0	1,000.00	Yes	2.0	3.400	0.15
IP1608B224R-M0	220.00	No	5.50	3.11	0.2	IP2517A106R-M0	10,000.00	Yes	0.8	32.800	0.02
IP1608A474R-M0	470.00	No	4.00	5.06	0.15	IP Inductors					
IP1608A105R-M0	1,000.00	No	2.00	13.80	0.07	PART NUMBER	Inductance (L) (μ H)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP Inductors						IP3308L103R-M0	10.00	No	35.00	0.11	2.00
PART NUMBER	Inductance (L) (μ H)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps	IP3308J223R-M0	22.00	No	25.00	0.23	1.30
IP2517N102R-M0	1.00	Yes	250.0	0.040	3.00	IP3308F104R-M0	100.00	No	10.00	0.84	0.60

Steward
www.steward.com

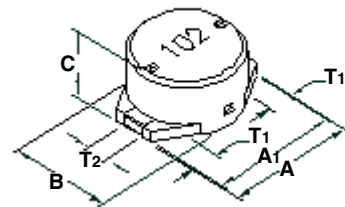
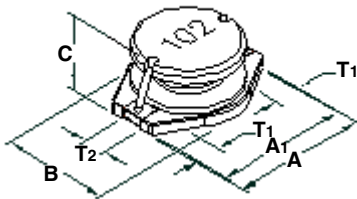
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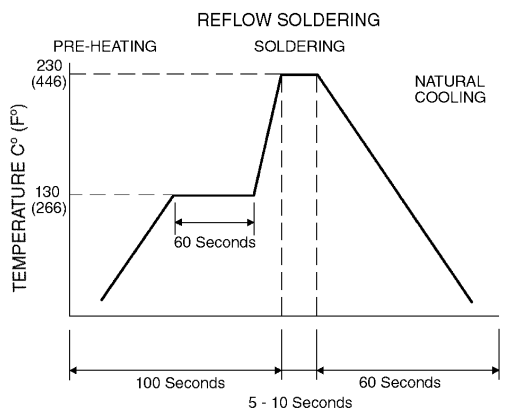
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP3308D224R-M0	220.00	No	6.00	1.90	0.40
IP3308B474R-M0	470.00	No	4.00	4.00	0.20
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP4939L103R-M0	10.00	Yes	38.0	.145	2.00
IP4939J223R-M0	22.00	Yes	22.0	.300	1.30
IP4939F104R-M0	100.00	Yes	9.5	1.40	0.60
IP4939D224R-M0	220.00	Yes	6.5	2.20	0.40
IP4939B474R-M0	470.00	Yes	4.5	5.10	0.20
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP3316T102R-M0	1.00	No	100.0	0.009	6.80
IP3316T222R-M0	2.20	No	80.0	0.012	6.10
IP3316Q472R-M0	4.70	No	45.0	0.018	4.80
IP3316O103R-M0	10.00	No	30.0	0.038	3.90
IP3316M223R-M0	22.00	No	19.0	0.085	2.70
IP3316J104R-M0	100.00	No	9.0	0.280	1.30
IP3316C105R-M0	1,000.00	No	2.0	3.000	0.30
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP5036R102R-M0	1.00	Yes	140.00	0.021	5.00
IP5036O222R-M0	2.20	Yes	80.00	0.032	3.80
IP5036M472R-M0	4.70	Yes	40.00	0.054	2.70
IP5036L103R-M0	10.00	Yes	35.00	0.101	2.00

IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP3340O103R-M0	10.00	No	22.00	0.040	3.50
IP3340M223R-M0	22.00	No	11.00	0.066	2.50
IP3340K473R-M0	47.00	No	8.00	0.110	1.60
IP3340J104R-M0	100.00	No	5.00	0.220	1.20
IP3340G224R-M0	220.00	No	3.50	0.440	0.70
IP3340A105R-M0	1,000.00	No	1.50	2.000	0.10
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP5022V102R-M0	1.00	No	80.00	0.009	8.60
IP5022T332R-M0	3.30	No	60.00	0.018	6.20
IP5022P103R-M0	10.00	No	30.00	0.031	4.30
IP5022O223R-M0	22.00	No	20.00	0.047	3.50
IP5022M473R-M0	47.00	No	9.00	0.086	2.60
IP5022K104R-M0	100.00	No	7.00	0.190	1.80
IP5022E105R-M0	1,000.00	No	2.00	1.800	0.56
IP Inductors					
PART NUMBER	Inductance (L) (μH)	Shielded	Self-Resonant Frequency (MHz)	DCR MAX OHMS	RATED I MAX (continuous) Amps
IP7259O103R-M0	10.00	Yes	30.00	0.040	3.90
IP7259N223R-M0	22.00	Yes	18.00	0.059	3.10
IP7259L473R-M0	47.00	Yes	10.00	0.097	2.40
IP7259K104R-M0	100.00	Yes	7.00	0.207	1.70
IP7259J224R-M0	220.00	Yes	5.00	0.470	1.10
IP7259E105R-M0	1,000.00	Yes	2.00	2.010	0.53

Power Inductors - Wound Specifications							Land Patterns for Reflow Soldering			
Package Size	A	A1	B	C	T1	T2	L **	W	H	G
1608 2517	6.60 MAX (0.260 MAX)	6.36 TYP (0.250 TYP)	4.45 MAX (0.175 MAX)	2.92 MAX (0.115 MAX)	1.02 + 0.20. (0.040 + 0.008)	1.27 + 0.20 (0.050 + 0.008)	6.86 (0.270)	1.40 (0.055)	3.56 (0.140)	5.34 (0.210)
3308	12.70 + 0.20 (0.500 + 0.008)	12.40 TYP (0.488 TYP)	10.00 + 0.20 (0.394 + 0.008)	3.00 + 0.30 (0.118 + 0.012)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	6.86 (0.270)	1.40 (0.055)	3.56 (0.140)	5.34 (0.210)
4939	12.70 + 0.20 (0.500 + 0.008)	12.40 TYP (0.488 TYP)	10.00 + 0.20 (0.394 + 0.008)	2.70 + 0.30 (0.118 + 0.012)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	6.86 (0.270)	1.40 (0.055)	3.56 (0.140)	5.34 (0.210)
3316	12.70 + 0.20 (0.500 + 0.008)	12.40 TYP (0.488 TYP)	10.00 + 0.20 (0.394 + 0.008)	5.00 + 0.30 (0.197 + 0.012)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	13.30 (0.524)	3.00 (0.118)	2.80 (0.110)	10.00 (0.394)
5036	12.70 + 0.20 (0.500 + 0.008)	12.40 TYP (0.488 TYP)	10.00 + 0.20 (0.394 + 0.008)	4.90 + 0.30 (0.193 + 0.012)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	13.30 (0.524)	3.00 (0.118)	2.80 (0.110)	10.00 (0.394)
3340	12.70 + 0.20 (0.500 + 0.008)	12.40 TYP (0.488 TYP)	10.00 + 0.20 (0.394 + 0.008)	11.00 + 0.50 (0.4338 + 0.02)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	13.30 (0.524)	3.00 (0.118)	2.80 (0.110)	10.00 (0.394)
5022 7259	18.40 + 0.30 (0.724 + 0.012)	18.10 TYP (0.713 TYP)	15.00 + 0.30 (0.591 + 0.012)	7.00 + 0.50 (0.276 + 0.020)	2.40 + 0.20 (0.094 + 0.008)	2.20 + 0.20 (0.087 + 0.008)	18.70 (0.736)	3.00 (0.118)	2.80 (0.110)	15.70 (0.618)



Recommended Soldering Conditions

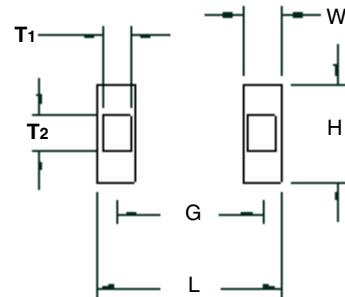


Wave soldering will require additional pre-heat time.

Equivalent Circuits



Land Patterns For Reflow Soldering



Steward produces an extensive line of solution focussed ferrite products for Inductive and EMI Filtering Applications. Products include ferrite EMI cable cores, connector plates, unique common mode chokes, can-bus chokes, high current thru hole and surface mount components, impedance chip beads, surface mount inductors, toroid inductor cores and ferrite powders. Please consult our web site or contact your nearest Steward office or representative for additional information.

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