

- 40 MHz to 50+ GHz Operation
- <1% Total Mass Loss per ASTM E595 Outgas Testing
- Current Ratings now up to 10 Amps



ISO 9001:2015
CERTIFIED



ISO 13485:2016
CERTIFIED



AS9100
REV D
WITH ISO 9001:2015

BROADBAND CONICALS



Inductor Solutions for High Frequency Applications

Gowanda's flying lead (thru-hole) and SMT (surface mount) broadband conical inductors offer predictable frequency response and repeatable performance from 40 MHz to 50+ GHz with current ratings up to 10 Amps and <1% TML & <0.10 CVMC per ASTM E595 outgassing test. These conicals are specifically designed for high frequency applications where ultra-low insertion loss & return loss are design requirements. Their unique construction helps to limit the effects caused by stray capacitance. Reliability to M83446D, upscreening capability to MIL-STD-981, unique footprints and both standard & custom design options enhance utility. For assistance please call +1-716-532-2234 or email sales@gowanda.com.



RF Flying Lead

Wirewound, Conical, Powdered Iron Core

PART NUMBER	L μ H @ 10 MHz	DCR Ω NOM	CURRENT RATING mA DC	TURNS	WIRE SIZE AWG
SERIES C050FL					
C050FL2144G6	0.28	0.45	280	21	44
C050FL2947G6	0.47	0.87	275	29	47
SERIES C070FL					
C070FL1538G6	0.165	0.080	625	15	38
C070FL2040G6	0.265	0.170	425	20	40
C070FL2542G6	0.390	0.280	340	25	42
C070FL3044G6	0.550	0.600	235	30	44
C070FL3445G6	0.700	0.820	190	34	45
C070FL3846G6	0.800	1.00	175	38	46
C070FL4347G6	1.050	1.50	150	43	47
SERIES C100FL					
C100FL1938G6	0.26	0.10	573	19	38
C100FL2540G6	0.37	0.21	396	25	40
C100FL3142G6	0.58	0.47	264	31	42
C100FL3944G6	1.00	0.74	211	39	44
C100FL4947G6	1.54	1.70	140	49	47
SERIES C102FL					
C102FL2238G6	0.47	0.19	815	22	38
C102FL2740G6	0.70	0.32	619	27	40
C102FL3442G6	1.10	0.64	438	34	42
C102FL4544G6	2.00	1.60	277	45	44
C102FL6047G6	3.80	3.70	182	60	47
SERIES C182FL					
C182FL3638G6	1.47	0.33	694	36	38
C182FL4840G6	2.00	0.65	494	48	40
C182FL6042G6	3.30	1.29	350	60	42
C182FL7844G6	6.00	2.85	236	78	44
C182FL11047G6	10.70	7.10	150	110	47
SERIES C225FL					
C225FL2935G6	0.60	0.16	562	29	35
C225FL3536G6	0.89	0.39	360	35	36
C225FL4338G6	1.30	0.47	328	43	38
C225FL5740G6	2.40	0.80	251	57	40
C225FL7042G6	3.80	1.50	184	70	42
C225FL8544G6	5.10	2.60	139	85	44
C225FL11047G6	8.00	6.40	89	110	47

High Current RF Flying Lead

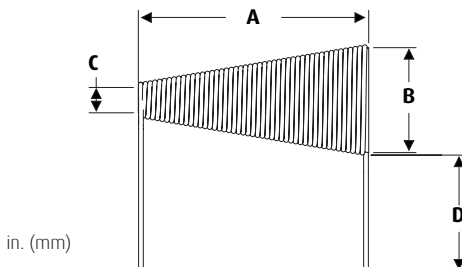
Wirewound, Conical, Powdered Iron Core

PART NUMBER	L μ H @ 10 MHz TYP	DCR Ω MAX	CURRENT RATING mA DC	TURNS	WIRE SIZE AWG
SERIES C305FL					
C305FL1726C6	0.30	0.020	7200	17	26
C305FL2128C6	0.50	0.035	3500	21	28
C305FL2830C6	0.90	0.070	2000	28	30
C305FL3432C6	1.0	0.125	1300	34	32
SERIES C550FL					
C550FL1520C6	1.2	0.020	10500	15	20
C550FL2524C6	3.1	0.035	4500	25	24
C550FL3126C6	5.0	0.070	3000	31	26
C550FL3528C6	6.8	0.125	2200	35	28
SERIES C750FL					
C750FL2220C6	2.5	0.020	8100	22	20
C750FL3424C6	7.0	0.070	4100	34	24
C750FL4326C6	12	0.140	3000	43	26
C750FL5328C6	16	0.265	2200	53	28
SERIES C1000FL					
C1000FL2920C6	5	0.030	7700	29	20
C1000FL4524C6	13	0.110	3800	45	24
C1000FL5726C6	22	0.215	2700	57	26

NOTES

- Operating Temperature Range: -55°C to +125°C
- Current Rating is based on a 100°C temperature rise at an ambient temperature of 25°C (for C102FL and C182FL); for all other flying lead series it is based on a 35°C temperature rise at an ambient temperature of 90°C
- All non-tolerance and electrical data are reference only and based on nominal data
- Terminations: gold and RoHS compliant
- Meets a TML (Total Mass Loss) requirement of 1.0% maximum when tested in accordance with ASTM E595; this calculation does not include WVR (Water Vapor Recovered).

DIMENSIONS



SERIES	A REF	B REF	C REF	D REF	SERIES	A REF	B MAX	C REF	D MAX
C050FL	0.050 (1.27)	0.025 (0.635)	0.008 (0.20)	0.125 (3.17)	C305FL	0.305 (7.747)	0.100 (2.54)	0.020 (0.508)	0.50 (12.7)
C070FL	0.070 (1.778)	0.031 (0.779)	0.006 (0.152)	0.150 (3.81)	C550FL	0.550 (13.97)	0.300 (7.62)	0.100 (2.54)	0.50 (12.7)
C100FL	0.100 (2.54)	0.040 (1.00)	0.004 (0.10)	0.150 (3.81)	C750FL	0.750 (19.05)	0.370 (9.398)	0.110 (2.79)	0.50 (12.7)
C102FL	0.102 (2.59)	0.066 (1.68)	0.010 (0.25)	0.150 (3.81)	C1000FL	1.00 (25.4)	0.450 (11.43)	0.110 (2.79)	0.50 (12.7)
C182FL	0.182 (4.62)	0.076 (1.93)	0.010 (0.25)	0.150 (3.81)					
C225FL	0.225 (5.72)	0.070 (1.78)	0.004 (0.10)	0.300 (7.62)					

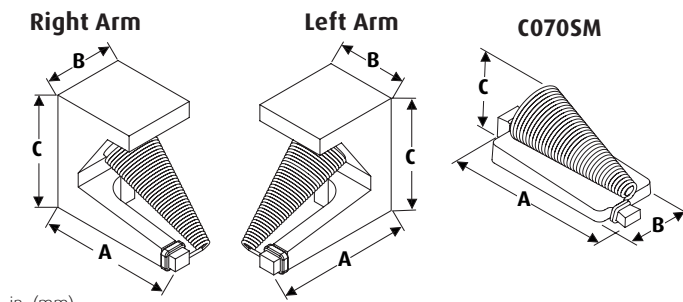
Please refer to series datasheets and dimensional specifications for complete information.



RF Surface Mount

Wirewound, Conical, Powdered Iron Core

DIMENSIONS



in. (mm)

SERIES	A REF	B REF	C REF	ARM STYLE
C070SM	0.105 (2.67)	0.040 (1.02)	0.044 (1.11)	-
C100SMNL	0.130 (3.30)	0.065 (1.65)	0.110 (2.80)	Left
C100SMNR	0.130 (3.30)	0.065 (1.65)	0.110 (2.80)	Right
C102SM	0.127 (3.23)	0.080 (2.03)	0.105 (2.67)	Right
C182SM	0.245 (6.22)	0.113 (2.87)	0.117 (2.97)	Right
C225SM	0.250 (6.35)	0.140 (3.65)	0.195 (4.95)	Right

NOTES

- Operating Temperature Range: -55°C to +125°C
- Current Rating is based on a 100°C temperature rise at an ambient temperature of 25°C (for C102SM and C182SM); for all other surface mount series it is based on a 35°C temperature rise at an ambient temperature of 90°C
- All non-tolerance and electrical data are reference only and based on nominal data
- Terminations: gold and RoHS compliant
- Terminal is elongated to allow for soldering close to the tip of the coil
- Recommended that component is epoxied to substrate before reflow soldering
- Meets a TML (Total Mass Loss) requirement of 1.0% maximum when tested in accordance with ASTM E595; this calculation does not include WVR (Water Vapor Recovered).

PART NUMBER	L μ H @ 10 MHz	DCR Ω NOM	CURRENT RATING mA DC	TURNS	WIRE SIZE AWG
SERIES C070SM					
C070SM1538G6	0.165	0.080	625	15	38
C070SM2040G6	0.265	0.170	425	20	40
C070SM2542G6	0.390	0.280	340	25	42
C070SM3044G6	0.550	0.600	235	30	44
C070SM3445G6	0.700	0.820	190	34	45
C070SM3846G6	0.800	1.00	175	38	46
C070SM4347G6	1.050	1.50	150	43	47
SERIES C100SMNL					
C100SMNL1938G6	0.20	0.10	655	19	38
C100SMNL2540G6	0.44	0.21	452	25	40
C100SMNL3142G6	0.58	0.47	302	31	42
C100SMNL3944G6	1.00	0.74	241	39	44
C100SMNL4947G6	1.54	1.70	140	49	47
SERIES C100SMNR					
C100SMNR1938G6	0.20	0.10	655	19	38
C100SMNR2540G6	0.44	0.21	452	25	40
C100SMNR3142G6	0.58	0.47	302	31	42
C100SMNR3944G6	1.00	0.74	241	39	44
C100SMNR4947G6	1.54	1.70	140	49	47
SERIES C102SM					
C102SM2238G6	0.47	0.19	815	22	38
C102SM2740G6	0.70	0.32	619	27	40
C102SM3442G6	1.10	0.64	438	34	42
C102SM4544G6	2.00	1.60	277	45	44
C102SM6047G6	3.80	3.70	182	60	47
SERIES C182SM					
C182SM3638G6	1.47	0.33	694	36	38
C182SM4840G6	2.00	0.65	494	48	40
C182SM6042G6	3.30	1.29	350	60	42
C182SM7844G6	6.00	2.85	236	78	44
C182SM11047G6	10.70	7.10	150	110	47
SERIES C225FL					
C225SM2432G6	0.45	0.07	1100	24	32
C225SM2935G6	0.60	0.16	733	29	35
C225SM3536G6	0.89	0.39	469	35	36
C225SM4338G6	1.30	0.47	428	43	38
C225SM5740G6	2.40	0.80	328	57	40
C225SM7042G6	3.60	1.50	239	70	43
C225SM8544G6	5.10	2.60	182	85	44
C225SM11047G6	8.00	6.40	116	110	47

Please refer to series datasheets and dimensional specifications for complete information.

Conicals with Current Ratings up to 10 Amps

Gowanda's Design Provides Highest DC Current Handling Capability in the Industry

Gowanda Electronics now offers flying lead broadband conical inductors with up to 10 Amps of DC current handling - the highest level in the industry - and low insertion loss. The four series - C305FL, C550FL, C750FL and C1000FL - were developed to address market needs and industry trends calling for ever-increasing performance from broadband conical components. Gowanda's series are utilized in communication applications for bias T's (filter signals, remove noise), broadband chip manufacturing, communication platforms, high frequency, microwave circuitry, RF test set-ups, test & measurement, test gear, test instrumentation and transmission amplifiers.

As with Gowanda's previously introduced conicals, these series offer excellent robust construction to assure predictable frequency response and repeatable RF performance. The unique broadband response of the coil is attributed to its precision winding, wire selection and coil configuration.



G O W A N D A

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