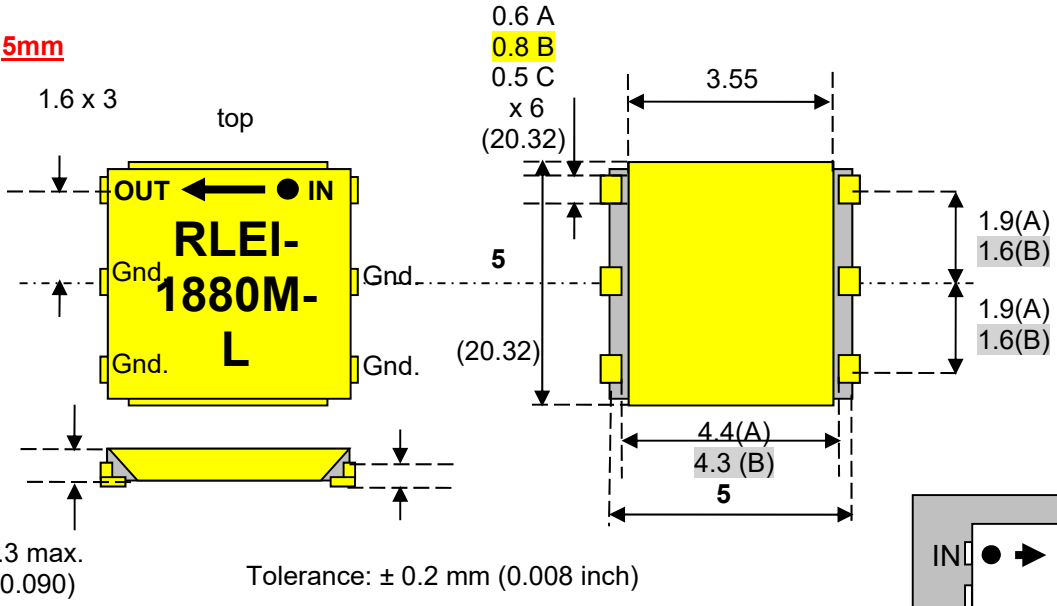
LUMPED ELEMENT ISOLATORS 5x5 mm & 7x7mm, CIRCULATOR 5x5mm

These parts have limited availability and are in end of life

LUMPED ELEMENT ISOLATORS 5x5 mm 1 or 2 Watt Reverse

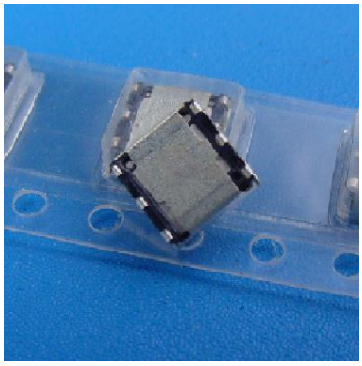
RADITEK Lumped element isolators offer a low cost inter-stage matching solution.
These are available currently in the frequency bands shown; other bands can be offered for high volume applications.
They are currently manufactured in **5x5 mm in lots of 2000** and **7x7 mm in lots of 2500**
Smaller quantities often available from stock

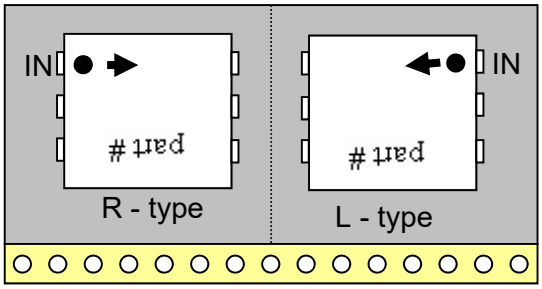
5mm



Tolerance: ± 0.2 mm (0.008 inch)

Footprint: A < 1GHz
B > 1GHz





Order as: RLEI-F1-F2M-5mm-(Reverse Power)W(L or R)
Packing: Tape and reel (2000 per reel, minimum order).
Operating temperature: -35 to +85 ºC.
Storage temperature: -40 to +85 ºC.
Survive 260 ºC for 30 seconds (for Reflow process).
Condition for Vibration Test: -Frequency: 10~55Hz
-Amplitude: 1.5mm
-X,Y,Z each 2Hr
Power Forward 5W, Power Reverse 1.0W
Approximate weight (5mm): 0.23g, 0.0005Lb

Standard Packaging:
5X5mm 2000 EA and 7X7mm 2500 EA

RLEI Stocking and Availability
RLEI Parts are designed and priced for high volume applications typically in cell phones
Parts available are shown on the data sheets. These and only these are readily available,
Availability
Quantities less than a full reel
Stock Items: We often have smaller quantities in stock; these are available in any quantity
Non Stock Items: Due to set up times on our automated assembly lines, we can only make these in full reels.
Lead time is typically 4-6 weeks. Sales Group in San Jose will offer these at a reduced MOQ holding the reel balance in stock
Minimum Order Quantity (MOQ) 5mm and 7mm (500)

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

Specifications: Part #	QOH	Center Frequency (MHz) in production	Part Marking	Full Band width (MHz)	Band	Insertion loss dB (max.)	Isolation dB (min.)	VSWR	Fwd Power	Rev Power	Foot Print/ Prod
RLEI-824-849M-5mm-1WL	1500	836.5	G836	25	CDMA	0.8	13	1.5:1	5	1.0	A
RLEI-1610-1626M-5mm-1WL	233	1618	1G61	16		0.65	14	1.5:1	5	1.0	B
RLEI-1930-2000M-5mm-1WL Will cover 1920-1980M , 1930-1990M	1590	1960	1G95	70	PCS	0.85	13	1.7:1	10	2.0	B
RLEI-2110-2170M-5mm-1WL	1839	2140	2G14	60	W-CDMA	0.60	15	1.5:1	5	1.0	B
RLEI-2300-2400M-5mm-1WL	372	2350	2G35 or 2B35	100	W-LAN	0.70	13	1.5:1	5	1.0	B
RLEI-2500-2700M-5mm-1WL	875	2600	2G60	W-LAN		0.80 typ 1.1max	15 typ 12min	1.5 typ 1.62 max	5	1.0	B

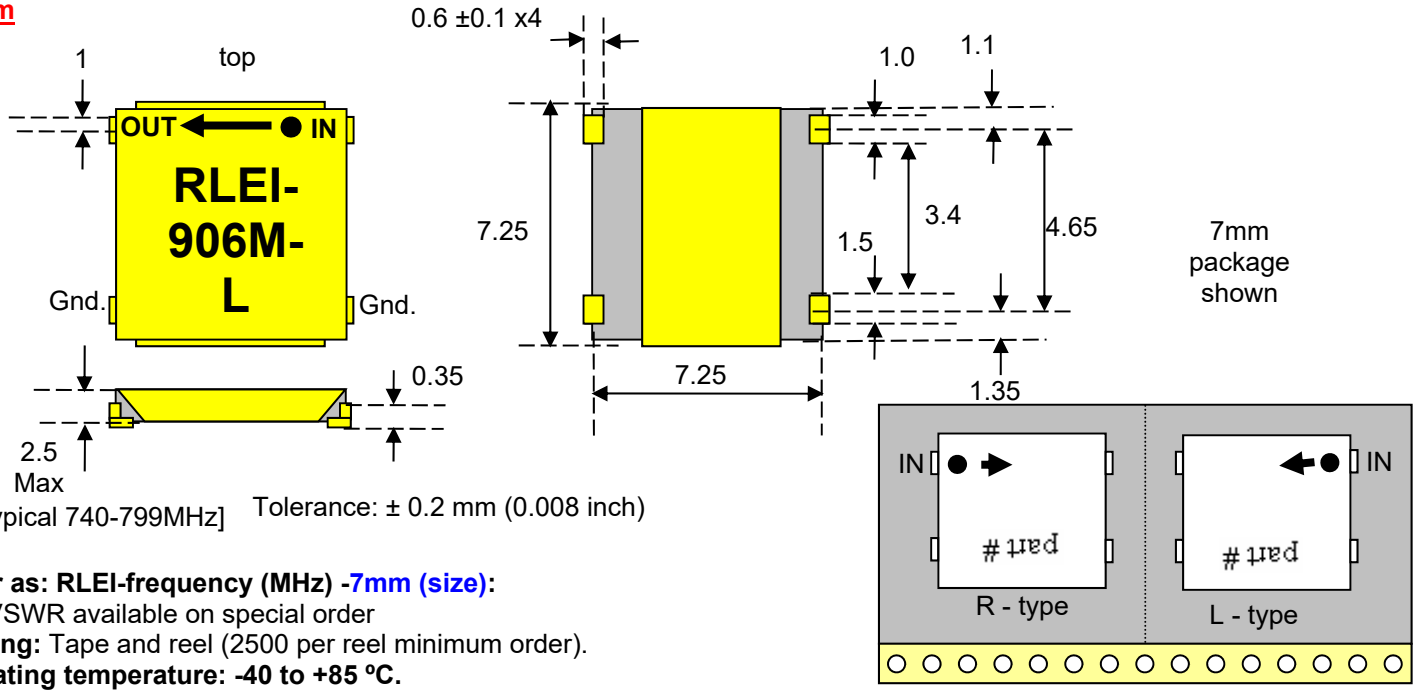
Phased out with stock in hand

	QOH										
RLEI-806-824M-5mm-1WL	69	815	G815	TRS		0.55	15	1.5:1	5	1.0	A
RLEI-869-894M-5mm-1WL	8	881.5	G881	25	CDMA	0.8	13	1.5:1	5	1.0	A
RLEI-880-915M-5mm-1WL	485	897.5	G897	35	E-GSM	0.75	13	1.5:1	5	1.0	A
RLEI-890-915M-5mm-1WL-M1	46	902.5	A902	25	GSM	0.75 RT 0.8 OT	13	1.5:1	5	1.0	A
RLEI-890-915M-5mm-1WL-M2	775	902.5	A902	25	GSM	0.75 RT 0.8 OT	13	1.5:1	5	1.0	A
RLEI-935-960M-5mm-1WL	2,613	947.5	A947	25	GSM	0.75 RT 0.8 OT	13	1.5:1	5	1.0	A
RLEI-935-960M-5mm-1WR	990	947.5	A947	25	GSM	0.75 RT 0.8 OT	13	1.5:1	5	1.0	A
RLEI-1560-1590M-5mm-1WL	1,866	1575	1G57	30	GPS	0.60	13	1.5:1	5	1.0	B
RLEI-1645-1675M-5mm-1WL	73	1660	1G66			0.60	15	1.5:1	5	1.0	B
RLEI-1710-1785M-5mm-1WL	809	1747.5	1G74	75	DCS	0.7	13	1.5:1	5	1.0	B
RLEI-1805-1880M-5mm-1WL	2,290	1842	1G84	75	DCS	0.70	13	1.5:1	5	1.0	B
RLEI-1805-1880M-5mm-1WR	1,001	1842	1G84	75	DCS	0.70	13	1.5:1	5	1.0	B
RLEI-1840-1870M-5mm-1WL	45	1855	1G85	30	K-PCS	0.60	15	1.5:1	5	1.0	B
RLEI-1850-1910M-5mm-1WL	1,372	1880	1G88	60	US-PCS	0.60	15	1.5:1	5	1.0	B
RLEI-1850-1910M-5mm-1WR	1,336	1880	1G88	60	US-PCS	0.60	15	1.5:1	5	1.0	B
RLEI-1877-1937M-5mm-1WR	1,161	1907	1G90	30	PCS	0.60	15	1.5:1	5	1.0	B
RLEI-1930-1990M-5mm-1WR	291	1960	1G96	60	US-PCS	0.60	15	1.5:1	5	1.0	B
RLEI-2110-2170M-5mm-1WR	996	2140	2G14	60	W-CDMA	0.60	15	1.5:1	5	1.0	B
RLEI-2410-2470M-5mm-1WL	491	2440	2G44	W-LAN		0.60	15	1.5:1	5	1.0	B
RLEI-2600-2700M-5mm-1WR	900	2650	2G65	100		0.7	13	1.5:1	10	2.0	B
RLEI-2615-2675M-5mm-1WL	123	2645	2G55	70		0.90	13	1.7:1	10	2.0	B

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

LUMPED ELEMENT ISOLATORS 7x7 mm

7 mm



Tolerance: ± 0.2 mm (0.008 inch)

Order as: RLEI-frequency (MHz) -7mm (size):
*1.3 VSWR available on special order
Packing: Tape and reel (2500 per reel minimum order).
Operating temperature: -40 to +85 ºC.
Survive 250 ºC for 30 seconds (for Reflow process).
Power Forward 10W
Power Reverse 1.0W
Approximate weight (7mm): 0.53g

Standard Packaging:7X7mm 2500 EA

Current Products (These and only these are in current production) Specifications: Part #	stock	Center Frequency (MHz)	Part Marking	Full Band width MHz	Band	Insertion loss dB (max.)	Isolation dB (min.)	VSWR	Fwd Power	Rev Power
RLEI-887-925M-7mm-1WL	0	906	G906	38	EGSM	0.65	13	1.6:1	10	1.0
RLEI-2110-2170M-7mm-1WL	1223	2140	2G14	60	WCDMA	0.6	15	1.5:1	10	1.0

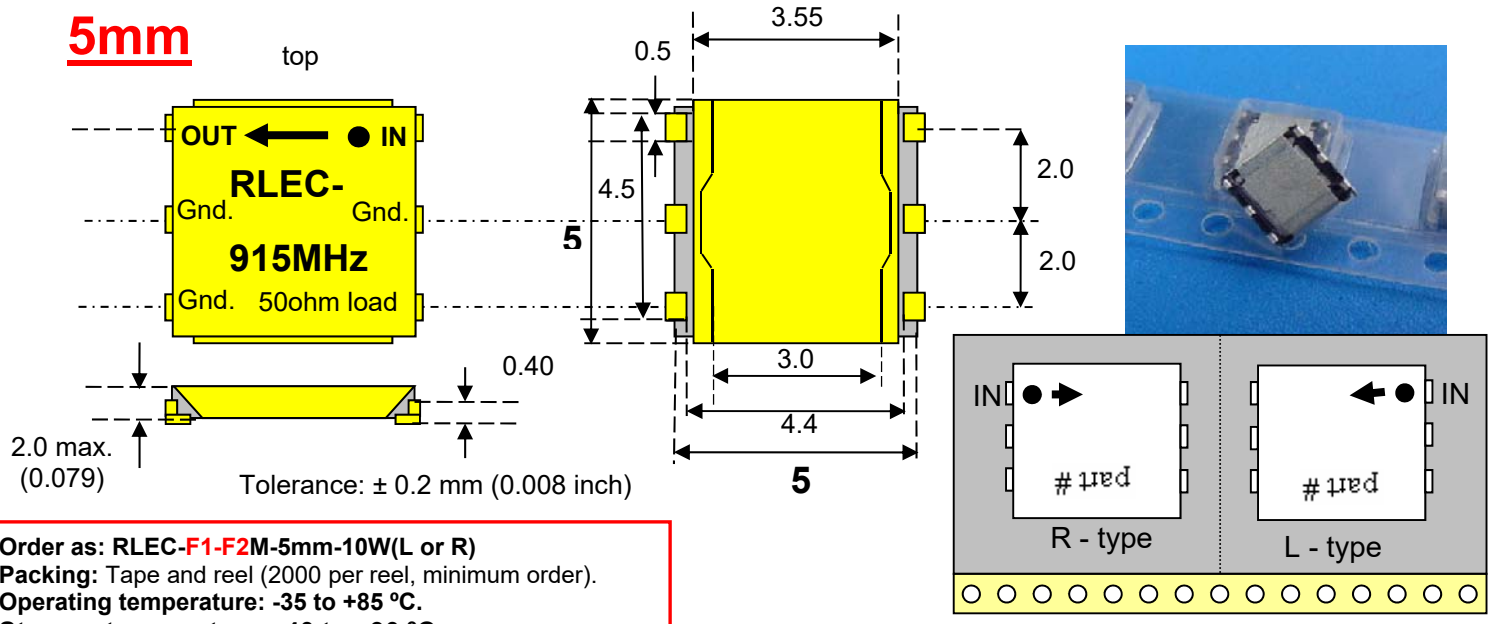
Phased out with stock in hand

RLEI-824-849M-7mm-1WR	2,295	836.5	G836	25	CDMA	0.65	15	1.5:1	10	1.0
RLEI-869-894M-7mm-1WL	561	881.5	G881	25	CDMA	0.65	15	1.5:1	10	1.0
RLEI-880-915M-7mm-1WL	2,498	897.5	G897	35		0.65	13	1.6:1	10	1.0
RLEI-925-960M-7mm-1WL	1,644	942	G942	35	GSM	0.65	15	1.5:1	10	1.0
RLEI-1710-1785M-7mm-1WL	4,700	1747.5	1G74	75	DCS	0.6	15	1.5:1	10	1.0
RLEI-1805-1880M-7mm-1WL	115	1842.5	1G84	75	DCS	0.6	15	1.5:1	10	1.0
RLEI-1805-1880M-7mm-1WR	685	1842.5	1G84	75	DCS	0.6	15	1.5:1	10	1.0
RLEI-1850-1910M-7mm-1WL	2,000	1880	1G88	60	US-PCS	0.6	15	1.5:1	10	1.0

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

LUMPED ELEMENT CIRCULATORS 5x5 mm

RADITEK Lumped element circulators offer a low cost inter-stage matching solution.
These are available currently in the frequency bands shown; other bands can be offered for high volume applications.
They are currently manufactured in **5x5 mm in lots of 2000** smaller quantities often available from stock



Order as: RLEC-F1-F2M-5mm-10W(L or R)
Packing: Tape and reel (2000 per reel, minimum order).
Operating temperature: -35 to +85 ºC.
Storage temperature: -40 to +90 ºC.
Survive 260 ºC for 30 seconds (for Reflow process).
Condition for Vibration Test
-Frequency: 10~55Hz
-Amplitude: 1.5mm
-X,Y,Z each 2Hr
Impedance: 50 ohm

Standard Packaging:5X5mm 2000 EA

Approximate weight (5mm): 0.23g

Current Products (These and only these are in current production)

Specifications: Part #	stock	Center Frequency (MHz)	Part Marking	Full Band width MHz	Insertion loss dB (max.)	Isolation dB (min.)	Return Loss dB (min.)	Power (Watts) Max.
RLEC-902-928M-5mm-5WL	559	915	C915	26	0.85	13	13	10

Phased out with stock in hand

RLEC-902-928M-5mm-5WR	1,823	915	C915	26	0.85	13	13	10

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

Materials and Plating
The pads are made of nickel, and are plated silver.
The body is Phosphor Bronze plated silver
The Termination is ceramic plated with nickel then tin

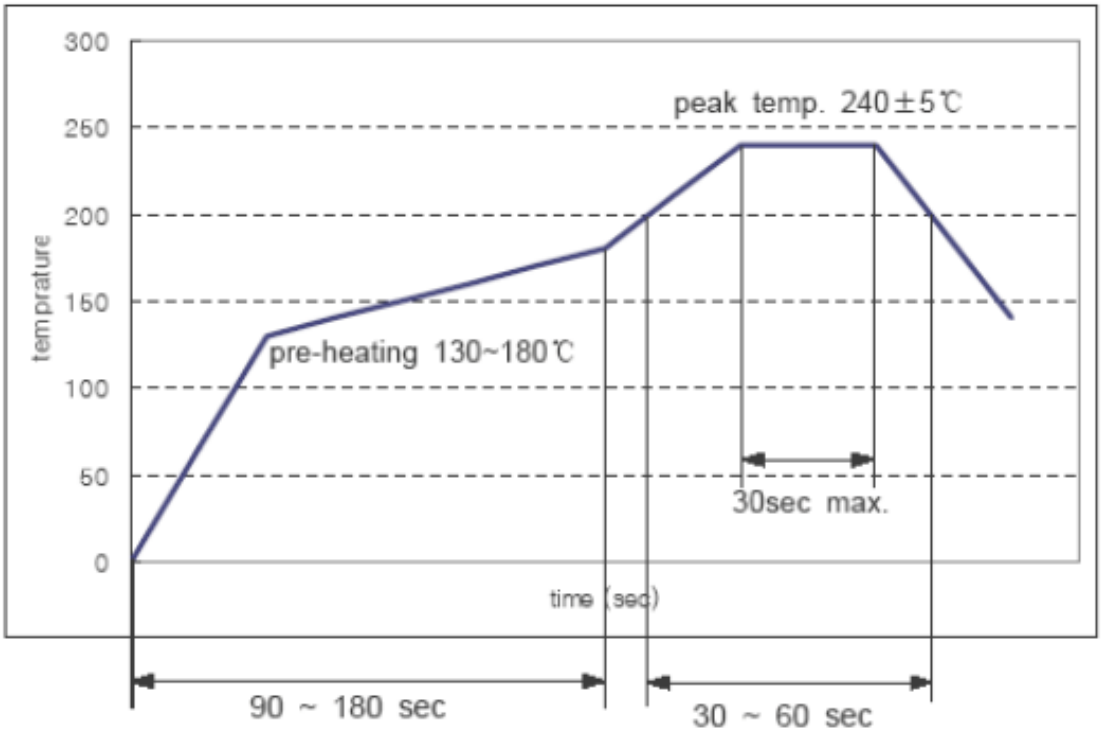
Note: the maximum reflow temperature is 260°C/10 sec
Parts withstand 2 cycles at 250C for 10 seconds

Thepartshavea2characterdatecode First
character: year (example -8 =2008) Second
character: month example -4 =April
(-1 to -9 January to September, // **-O, N, D** October, November, December

Soldering Condition:

Manual soldering (by soldering iron)
- Pre-heating Temperature: 120°C, 60 ~ 300 sec
- Soldering Temperature: 340°C ± 5°C, 5 sec max per each terminal

Reflow Soldering Profile



Note: the maximum reflow temperature is 260°C/10 sec
Parts withstand 2 cycles at 250C for 10 seconds

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com