

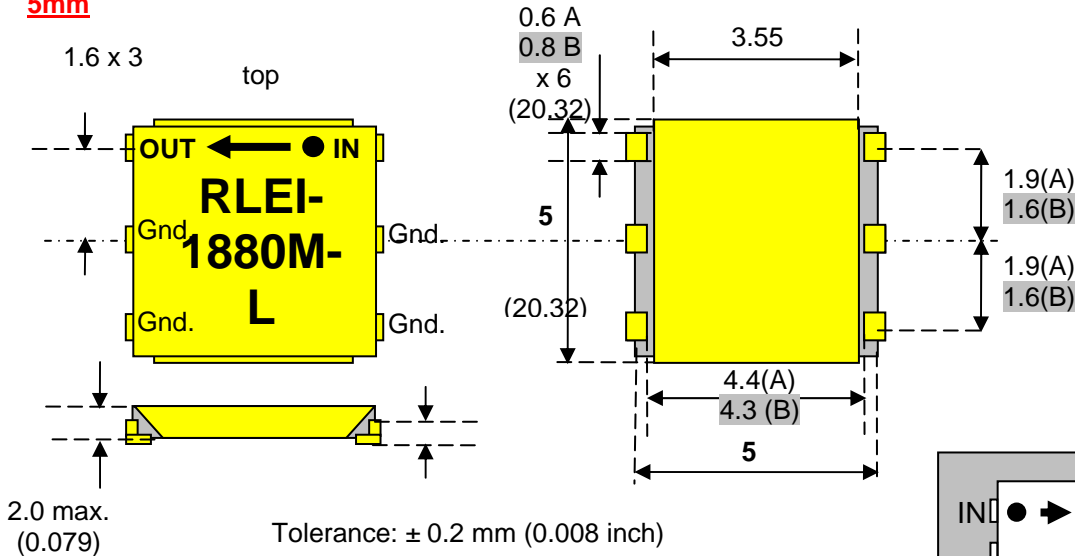
## LUMPED ELEMENT ISOLATORS 5x5 mm

RADITEK Lumped element isolators offer a low cost inter-stage matching solution.

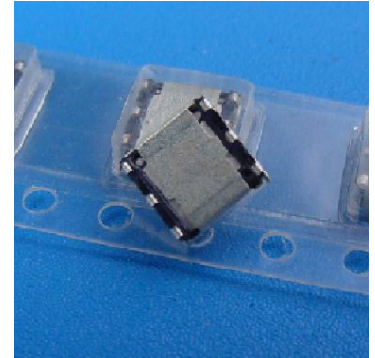
These are available currently in the frequency bands shown; other bands can be offered for high volume applications. They are currently manufactured in [5x5 mm in lots of 2000](#) and [7x7 mm in lots of 2500](#)

Smaller quantities often available from stock

### 5mm



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 °C.

**Survive 260 °C for 30 seconds (for Reflow process).**

**Condition for Vibration Test**

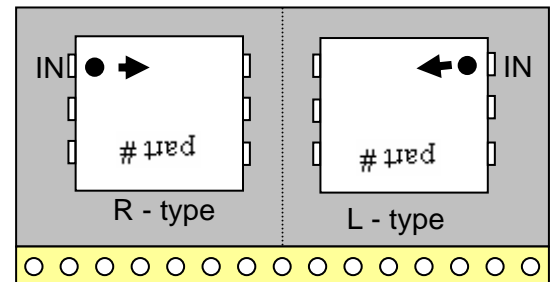
-Frequency: 10~55Hz

-Amplitude: 1.5mm

-X,Y,Z each 2HR

**Power Forward 5W**

**Power Reverse 1.0W**



**Standard Packaging:**  
5X5mm 2000 EA and 7X7mm 2500 EA  
New unit development requires a 10K piece commitment  
due to automated tooling and testing set up costs

Key  
Full Production (FP)  
Limited Production (LP)

Specifications:	Center Frequency (MHz)	Part Marking	Full Band width (MHz)	Band	Insertion loss dB (max.)	Isolation dB (min.)	VSWR	Fwd Power	Rev Power	Foot Print/ Prod
RLEI-806-824M-5mm-1WL/R	815	G815	18	TRS	0.55	15	1.5:1	5	1.0	A(LP)
RLEI-824-849M-5mm-1WL/R	836.5	G836	25	CDMA	0.8	13	1.5:1	5	1.0	A(FP)
RLEI-869-894M-5mm-1WL/R	881.5	G881	25	CDMA	0.8	13	1.5:1	5	1.0	A(FP)
RLEI-880-915M-5mm-1WL/R	897.5	G897	35	E-GSM	0.75	13	1.5:1	5	1.0	A(FP)
RLEI-890-915M-5mm-1WL/R	902.5	G902	25	GSM	0.65	13	1.5:1	5	1.0	A(FP)
RLEI-887-925M-5mm-1WL/R	906	G906	38	EGSM	0.70	11	1.6:1	5	1.0	(LP)
RLEI-925.5-959.5M-5mm-1WL/R	942.5	G942	35	EGSM	0.65	13	1.5:1	5	1.0	(LP)
RLEI-935-960M-5mm-1WL/R	947.5	G947	25	GSM	0.65	13	1.5:1	5	1.0	A(FP)
RLEI-1429-1453M-5mm-1WL/R	1441	1G44	24		0.60	15	1.5:1	5	1.0	B(LP)
RLEI-1560-1590M-5mm-1WL/R	1575	1G57	30	GPS	0.60	13	1.5:1	5	1.0	B(FP)

Specifications: Part #	Center Frequency (MHz)	Part Marking	Full Band width (MHz)	Band	Insertion loss dB (max.)	Isolation dB (min.)	VSWR	Fwd Power	Rev Power	Foot Print/ Prod
RLEI-1610-1626M-5mm-1WL/R +15 to 35C -35 to 85C	1618	1G61	16		0.60 0.65	15 14	1.4:1 1.5:1	5	1.0	B(LP)
RLEI-1626-1660M-5mm-1WL/R	1643	1G64	34		0.60	15	1.5:1	5	1.0	B(LP)
RLEI-1645-1675M-5mm-1WL/R	1660	1G66	30		0.60	15	1.5:1	5	1.0	B(LP)
RLEI-1710-1785M-5mm-1WL/R	1747.5	1G74	75	DCS	0.7	13	1.5:1	5	1.0	B(FP)
RLEI-1750-1780M-5mm-1WL/R	1765	1G76	30	K-PCS	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1805-1880M-5mm-1WL/R	1842.5	1G84	75	DCS	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1840-1870M-5mm-1WL/R	1855	1G85	30	K-PCS	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1850-1910M-5mm-1WL/R	1880	1G88	60	US-PCS	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1860-1940M-5mm-1WL/R +15 to 35C -35 to 85C	1900	1D90	80		0.7 0.8	14 13	1.5 1.6	5	1.0	B(LP)
RLEI-1877-1937M-5mm-1WL/R	1907	1G90	60	US-PCS	0.60	15	1.5:1*	5	1.0	B(LP)
RLEI-1920-1980M-5mm-1WL/R	1950	1G95	60	W-CDMA	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1930-1990M-5mm-1WL/R	1960	1G96	60	US-PCS	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-1977.5-2057.5M-5mm-1WL/R +15 to 35C -35 to 85C	2017.5	2D01	80		0.7 0.8	14 13	1.5 1.6	5	1.0	B(LP)
RLEI-2110-2170M-5mm-1WL/R	2140	2G14	60	W-CDMA	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-2200-2300M-5mm-1WL/R	2250	2G25	100	W-LAN	0.70	12	1.6:1	5	1.0	B(LP)
RLEI-2250-2350M-5mm-1WL/R	2300	2G30	100	US-PCS	0.75	15	1.5:1	5	1.0	B(LP)
RLEI-2300-2400M-5mm-1WL/R	2350	2G35	100	W-LAN	0.70	13	1.5:1	5	1.0	B(FP)
RLEI-2350-2450M-5mm-1WL/R	2400	2G40	100	WLAN	0.6 typ 0.7 max	14 typ 13 min	1.45 typ 1.5 typ	5	1.0	B(FP)
RLEI-2410-2470M-5mm-1WL/R	2440	2G44	60	W-LAN	0.60	15	1.5:1	5	1.0	B(FP)
RLEI-2420-2480M-5mm-1WL/R	2450	2G45	60	W-LAN	0.60	13	1.5:1	5	1.0	B(FP)
RLEI-2500-2700M-5mm-1WL/R	2600	2G60	200	W-LAN	0.80 typ 1.1max	15 typ 12min	1.5 typ 1.62 max	5	1.0	B(FP)
RLEI-2630-2655M-5mm-1WL/R	2642.5	2G64	25	DMB	0.7	13	1.5:1	5	1.0	B(FP)
RLEI-2615-2675M-5mm-1WL/R	2645	2G64	60	W-LAN	1.1	9	2.1:1	5	1.0	B(LP)

Weight of RLEI-5mm is 0.0005Lb, 0.0002Kg

### 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,

We can only develop new frequencies for a proven need of >10K units, due to automated tooling and testing set up costs

### Availability

They are available in reels as: 5mm (2000) and 7mm (2500) smaller quantities often available from stock

### Quantities less than a full reel

Stock Items: We often have smaller quantities in stock; these are available in any quantity

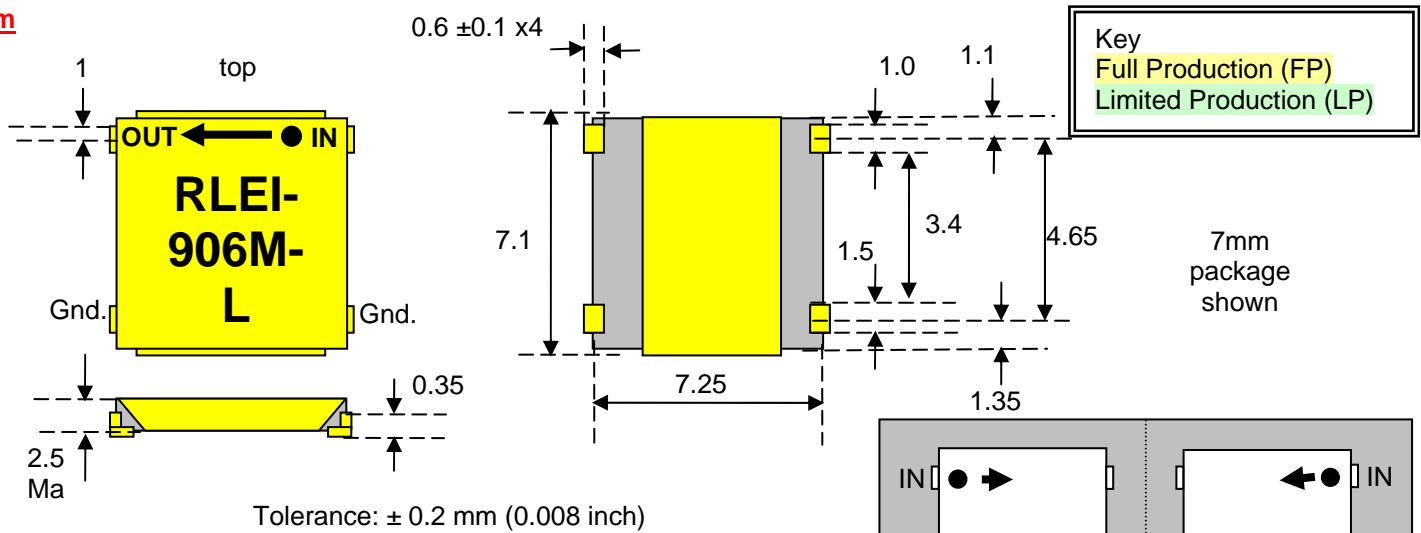
Non Stock Items: Due to set up times on our automated assembly lines, we can only make these in full reels.

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 (200)

## LUMPED ELEMENT ISOLATORS 7x7 mm

**7 mm**



**Order as: RLEI-frequency (MHz) -7mm (size):**

\*1.3 VSWR available on special order

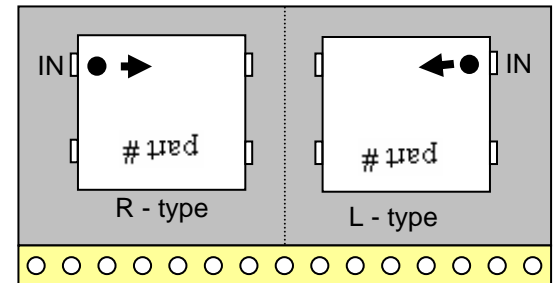
**Packing:** Tape and reel (2500 per reel minimum order).

**Operating temperature:** -40 to +85 °C.

**Survive 250 °C for 30 seconds (for Reflow process).**

**Power Forward 10W**

**Power Reverse 1.0W**



**Standard Packaging:**  
**5X5mm 2000 EA and 7X7mm 2500 EA**  
 New unit development requires a 10K piece commitment due to automated tooling and testing set up costs

Specifications: Part #	Center Frequency (MHz)	Part Marking	Full Band width MHz	Band	Insertion loss dB (max.)	Isolation dB (min.)	VSWR	Fwd Power	Rev Power	Prod
RLEI-824-849M-7mm-1WL/R	836.5	G836	25	CDMA	0.65	15	1.5:1	10	1.0	(FP)
RLEI-869-894M-7mm-1WL/R	881.5	G881	25	CDMA	0.65	15	1.5:1	10	1.0	(FP)
RLEI-880-915M-7mm-1WL/R	897.5	G897	35		0.65	13	1.6:1	10	1.0	(FP)
RLEI-890-915M-7mm-1WL/R	902.5	G902	25	GSM	0.65	15	1.5:1	10	1.0	(FP)
RLEI-935-960M-7mm-1WL/R	947.5	G947	25	GSM	0.65	15	1.5:1	10	1.0	(FP)
RLEI-1610-1626M-7mm-1WL/R	1618	1G18	16		0.65	14	1.5:1	10	1.0	(LP)
RLEI-1625-1661M-7mm-1WL/R	1643	1G43	36	Inmarsat	0.7	13	1.5:1	10	1.0	(FP)
RLEI-1710-1785M-7mm-1WL/R	1747.5	1G74	75	DCS	0.6	15	1.5:1	10	1.0	(FP)
RLEI-1750-1780M-7mm-1WL/R	1765	1G76	30	K-PCS	0.6	15	1.5:1	10	1.0	(FP)
RLEI-1805-1880M-7mm-1WL/R	1842.5	1G84	75	DCS	0.6	15	1.5:1	10	1.0	(FP)
RLEI-1850-1910-7mm-1WL/R	1880	1G88	60	US-PCS	0.6	15	1.5:1	10	1.0	(FP)
RLEI-1930-1990-7mm-1WL/R	1960	1G96	60	US-PCS	0.6	15	1.5:1	10	1.0	(FP)
RLEI-2110-2170-7mm-1WL/R	2140	2G14	60	WCDMA	0.6	15	1.5:1	10	1.0	(FP)

### Limited production

RLEI-887-925M-7mm-1WL/R	906	G906	38	EGSM	0.65	13	1.6:1	10	1.0	(LP)
RLEI-925-960M-7mm-1WL only	942	G942	35	GSM	0.65	15	1.5:1	10	1.0	(LP)
RLEI-1840-1870M-7mm-1WL/R	1855	1G85	30	K-PCS	0.6	15	1.5:1	10	1.0	(LP)
RLEI-1920-1980-7mm-1WL/R	1950	1G95	60	WCDMA	0.6	15	1.5:1	10	1.0	(LP)

## Special part # allocation

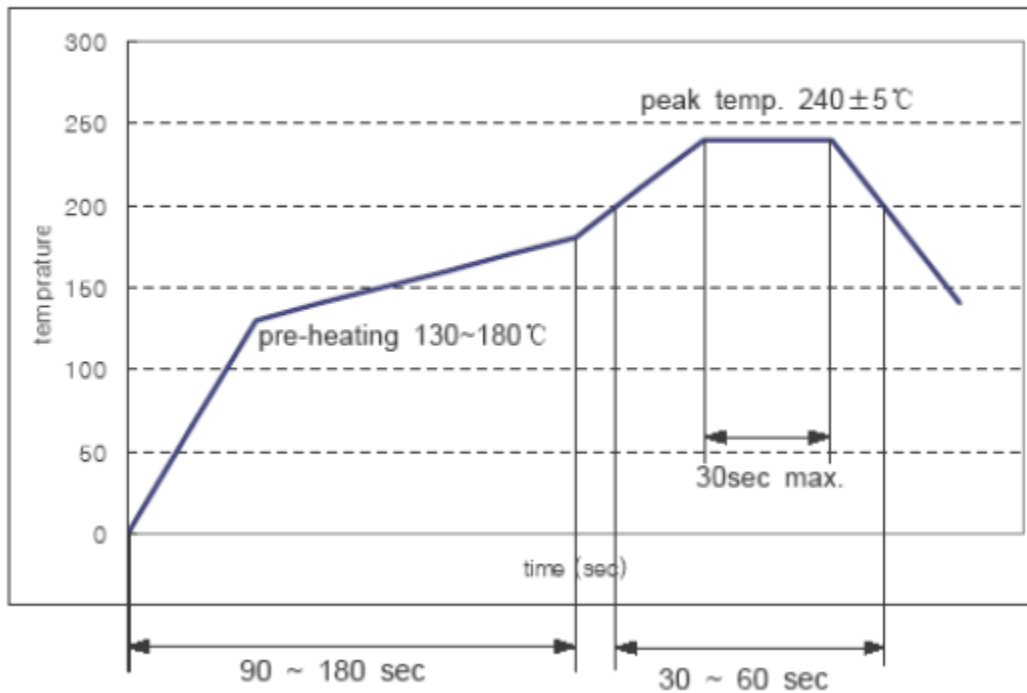
Raditek part #	unique Raditek p/n	discontinued Murata p/n
RLEI-880-915M-7mm-1WL	R62180-097L	CE073897MDCB000T1.
RLEI-1710-1785M-7mm-1WL	R62180-177L	CE0731G74DCB000T1

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 Profile



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

## The RLEI parts have a 2 character date code

First character: year (example -8 =2008)

Second character: month example -4 =April

(-1 to -9 January to September, // -O, N, D October, November, December)