

# RF Components

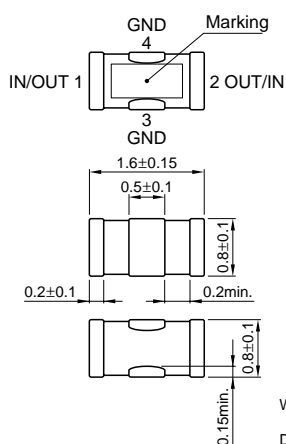
## Low Pass Filters Shielded

## DEA-L Series

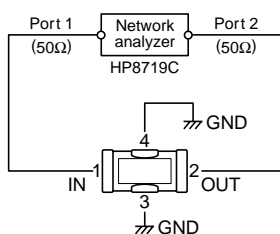
### FEATURES

- Smallest-in-the-industry-class compact, thin, and lightweight chip low pass filter manufactured in ceramic sheet multilayering process (L1.6×W0.8×T0.8mm/4mg).
- Wide range of characteristics including low loss type (corresponding to 3rd level) to high attenuation type (corresponding to 5th level) achieved according to circuit in use.
- Provided with excellent environmental resistance and stable characteristics achieved under use of portable remote terminal in hostile environment.

### SHAPES AND DIMENSIONS



### MEASURING DIAGRAM



### APPLICATIONS

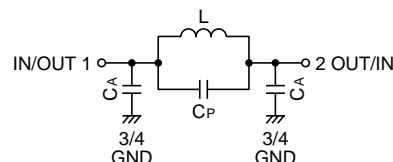
Cellular and digital cordless phones.

### TEMPERATURE RANGES

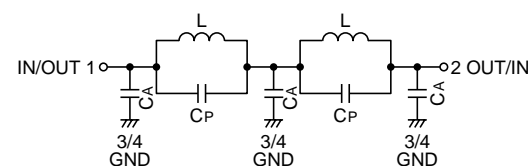
Operating	-25 to +80°C
Storage	-40 to +85°C

### EQUIVALENT CIRCUIT

#### LOW LOSS TYPE

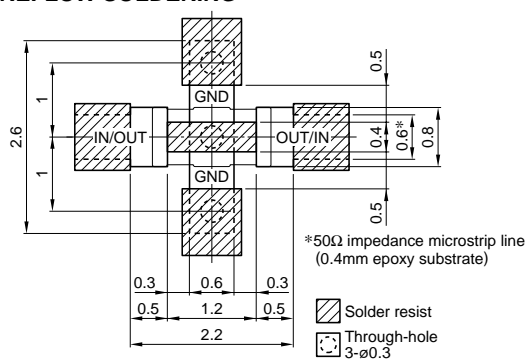


#### HIGH ATTENUATION TYPE



### RECOMMENED PC BOARD PATTERN

#### REFLOW SOLDERING



Dimensions in mm

### APPLICATIONS/TYPICAL ELECTRICAL CHARACTERISTICS

#### FOR 0.8 to 2.0GHz DIGITAL CELLULAR AND CORDLESS PHONES

Ta=25±5°C

Part No.	Applications	Frequency fo(MHz)	Insertion loss (dB) max.	2fo attenuation (dB)min.*1	3fo attenuation (dB)min.*2
DEA160915LT-1160	GSM	880 to 915	0.5	17	17
DEA160915LT-1156	GSM	880 to 915	0.6	27	23
DEA160915LT-1169	GSM	880 to 915	0.7	30	25
DEA160960LT-1153	PDC800	940 to 960	0.5	20	17
DEA161785LT-1158	DCS1800	1710 to 1785	0.5	27	23
DEA161880LT-1154	DCS1800	1710 to 1880	0.7	27	23
DEA161990LT-1155	PCS1900	1850 to 1990	0.5	27	20
DEA161990LT-1182	PCS1900	1850 to 1990	0.7	30	25
DEA161453LT-1152	PDC1500	1429 to 1453	0.5	20	20
DEA161980LT-1164	IMT-2000	1920 to 1980	0.5	27	20

\*1 2fo=Second harmonics out of band rejection

\*2 3fo=Third harmonics out of band rejection

Specifications which provide more details for the proper and safe use of the described product are available upon request.  
All specifications are subject to change without notice.

# RF Components

## DEA-L Series

### Low Pass Filters

### Shielded

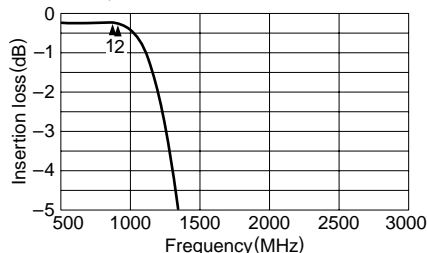
#### TYPICAL ELECTRICAL CHARACTERISTICS

#### ATTENUATION vs. FREQUENCY CHARACTERISTICS

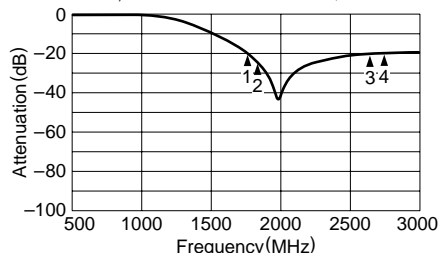
##### GSM

##### DEA160915LT-1160

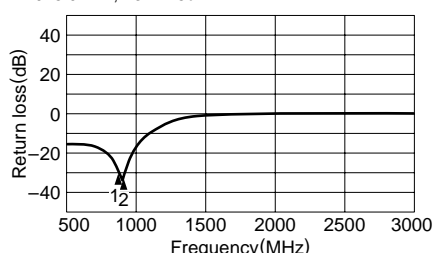
- 1: 880.0MHz, -0.238dB  
2: 915.0MHz, -0.260dB



- 1: 1760.0MHz, -20.181dB 3: 2640.0MHz, -20.138dB  
2: 1830.0MHz, -24.492dB 4: 2745.0MHz, -19.699dB

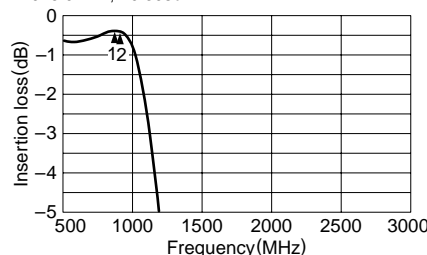


- 1: 880.0MHz, -30.972dB  
2: 915.0MHz, -32.275dB

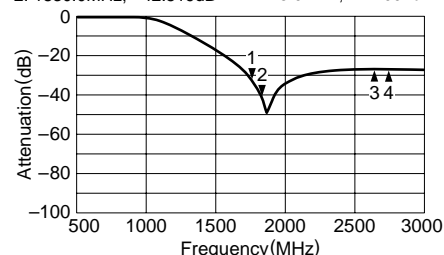


##### DEA160915LT-1156

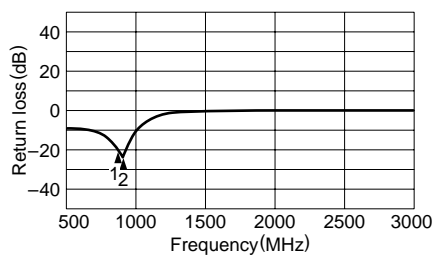
- 1: 880.0MHz, -0.371dB  
2: 915.0MHz, -0.398dB



- 1: 1760.0MHz, -32.838dB 3: 2640.0MHz, -27.037dB  
2: 1830.0MHz, -42.519dB 4: 2745.0MHz, -27.094dB

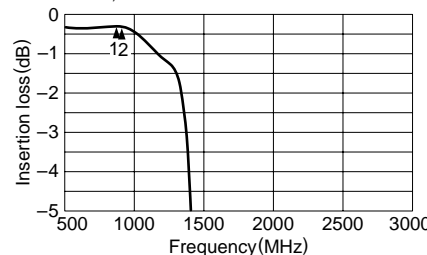


- 1: 880.0MHz, -21.279dB  
2: 915.0MHz, -23.566dB

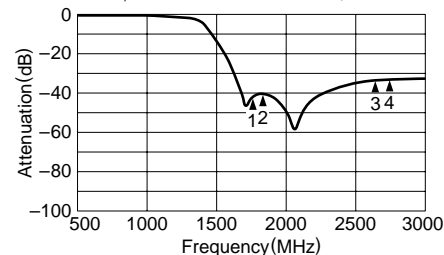


##### DEA160915LT-1169

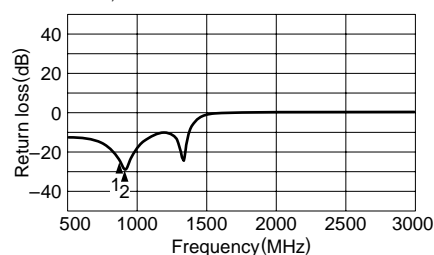
- 1: 880.0MHz, -0.276dB  
2: 915.0MHz, -0.297dB



- 1: 1760.0MHz, -41.563dB 3: 2640.0MHz, -33.647dB  
2: 1830.0MHz, -40.206dB 4: 2745.0MHz, -33.116dB



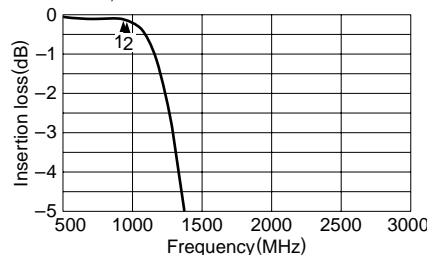
- 1: 880.0MHz, -25.276dB  
2: 915.0MHz, -29.385dB



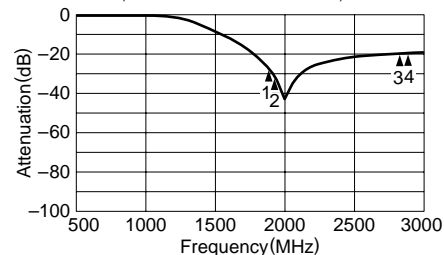
##### PDC800

##### DEA160960LT-1153

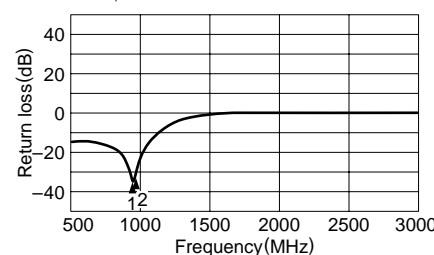
- 1: 940.0MHz, -0.130dB  
2: 960.0MHz, -0.143dB



- 1: 1880.0MHz, -27.0dB 3: 2820.0MHz, -20.1dB  
2: 1920.0MHz, -31.6dB 4: 2880.0MHz, -19.9dB



- 1: 940.0MHz, -34.673dB  
2: 960.0MHz, -32.612dB



# RF Components

## DEA-L Series

### Low Pass Filters

### Shielded

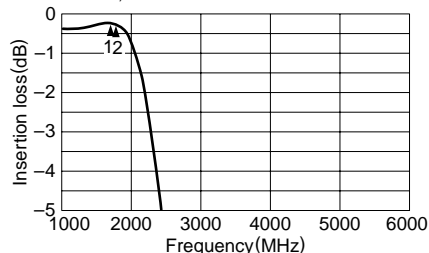
#### TYPICAL ELECTRICAL CHARACTERISTICS

#### ATTENUATION vs. FREQUENCY CHARACTERISTICS

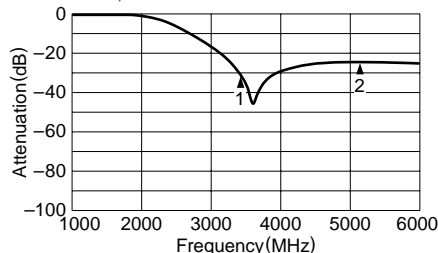
##### DCS1800

##### DEA161785LT-1158

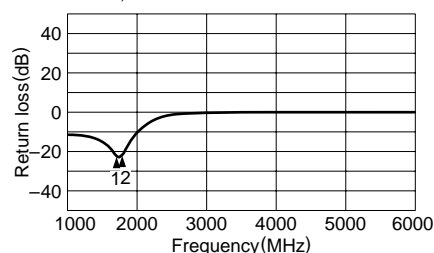
- 1: 1710.0MHz, -0.209dB  
2: 1785.0MHz, -0.240dB



- 1: 3420.0MHz, -31.110dB  
2: 5130.0MHz, -24.519dB

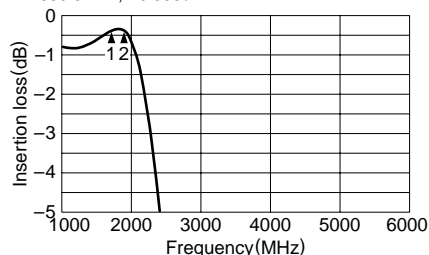


- 1: 1710.0MHz, -22.548dB  
2: 1785.0MHz, -22.338dB

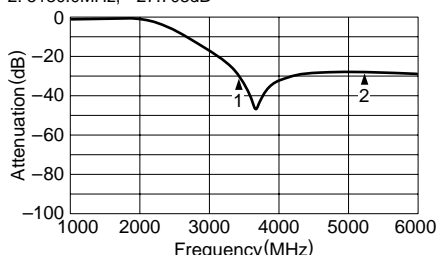


##### DEA161880LT-1154

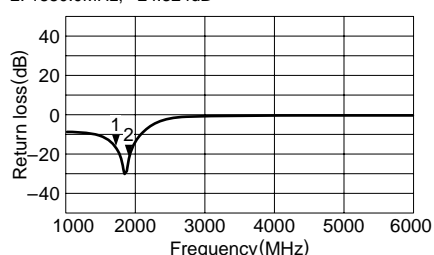
- 1: 1710.0MHz, -0.387dB  
2: 1880.0MHz, -0.398dB



- 1: 3420.0MHz, -30.113dB  
2: 5130.0MHz, -27.703dB



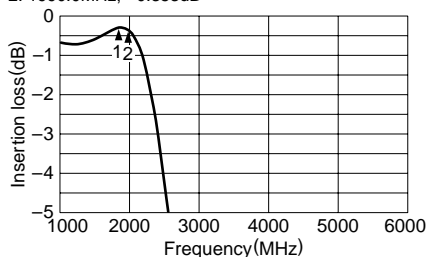
- 1: 1710.0MHz, -16.474dB  
2: 1880.0MHz, -24.324dB



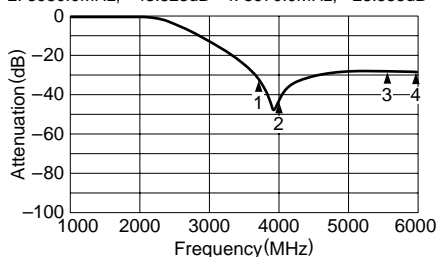
##### PCS1900

##### DEA161990LT-1155

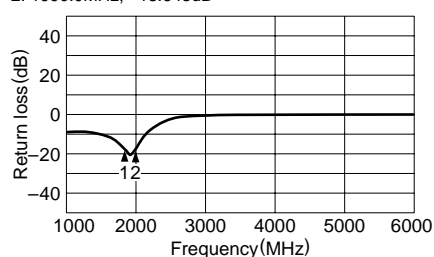
- 1: 1850.0MHz, -0.305dB  
2: 1990.0MHz, -0.353dB



- 1: 3700.0MHz, -32.713dB  
2: 3980.0MHz, -43.823dB  
3: 5550.0MHz, -28.256dB  
4: 5970.0MHz, -28.555dB

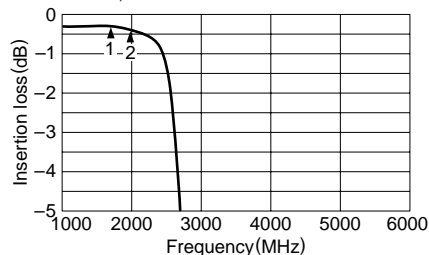


- 1: 1850.0MHz, -18.192dB  
2: 1990.0MHz, -18.643dB

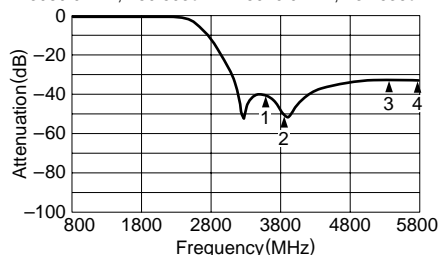


##### DEA161990LT-1182

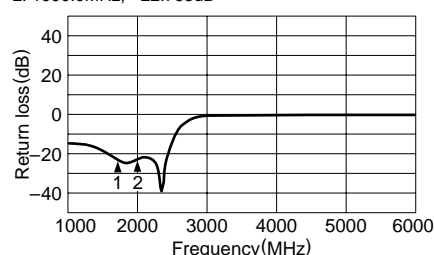
- 1: 1710.0MHz, -0.283dB  
2: 1990.0MHz, -0.375dB



- 1: 3700.0MHz, -40.413dB  
2: 3980.0MHz, -50.603dB  
3: 5550.0MHz, -32.642dB  
4: 5970.0MHz, -32.636dB



- 1: 1710.0MHz, -23.360dB  
2: 1990.0MHz, -22.763dB



# RF Components

## DEA-L Series

### Low Pass Filters Shielded

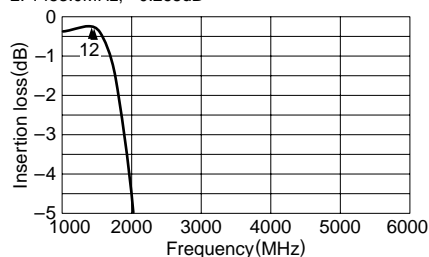
#### TYPICAL ELECTRICAL CHARACTERISTICS

##### ATTENUATION vs. FREQUENCY CHARACTERISTICS

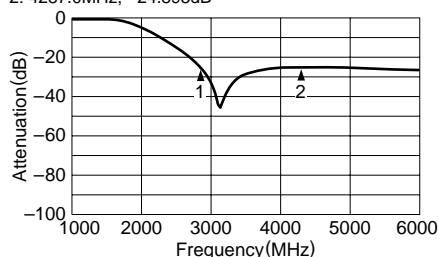
###### PDC1500

###### DEA161453LT-1152

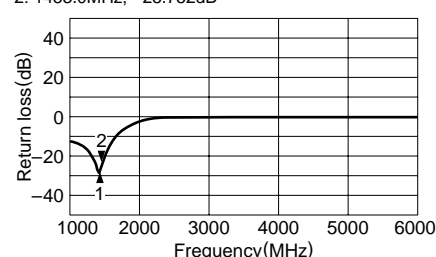
- 1: 1429.0MHz, -0.247dB  
2: 1453.0MHz, -0.265dB



- 1: 2858.0MHz, -26.020dB  
2: 4287.0MHz, -24.893dB



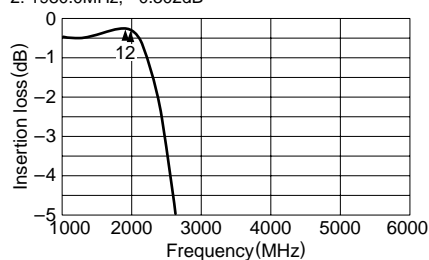
- 1: 1429.0MHz, -28.812dB  
2: 1453.0MHz, -25.752dB



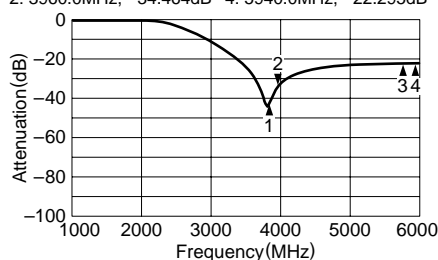
###### IMT-2000

###### DEA161980LT-1164

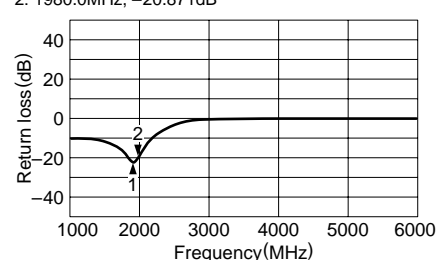
- 1: 1920.0MHz, -0.266dB  
2: 1980.0MHz, -0.302dB



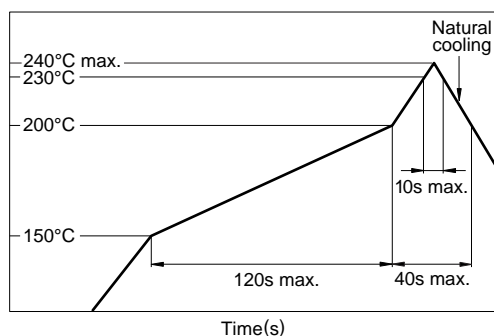
- 1: 3840.0MHz, -43.685dB 3: 5760.0MHz, -22.529dB  
2: 3960.0MHz, -34.464dB 4: 5940.0MHz, -22.295dB



- 1: 1920.0MHz, -22.168dB  
2: 1980.0MHz, -20.871dB



#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### APPLICATION EXAMPLES

##### DIGITAL CELLULAR

###### PDC1500

