

RF Components

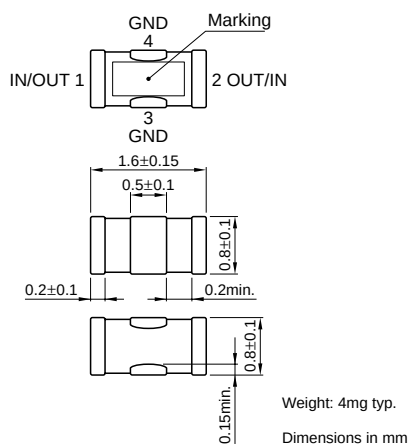
Low Pass Filters Shielded

DEA-L Series

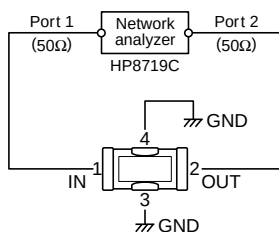
FEATURES

- 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

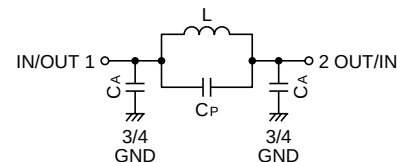
Cellular and digital cordless phones.

TEMPERATURE RANGES

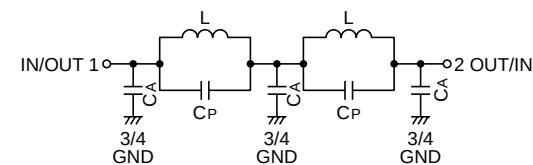
Operating	-25 to +80°C
Storage	-40 to +85°C

EQUIVALENT CIRCUITS

LOW LOSS TYPE

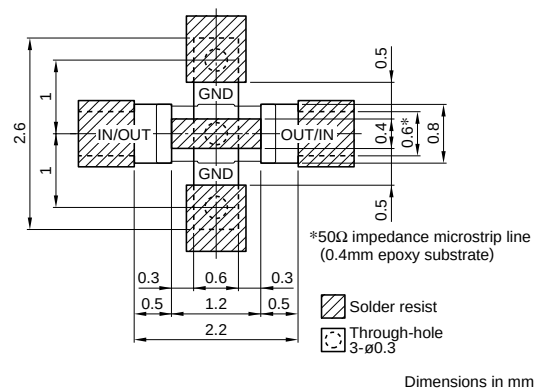


HIGH ATTENUATION TYPE



RECOMMENED PC BOARD PATTERN

REFLOW SOLDERING



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

RF Components

DEA-L Series

Low Pass Filters

Shielded

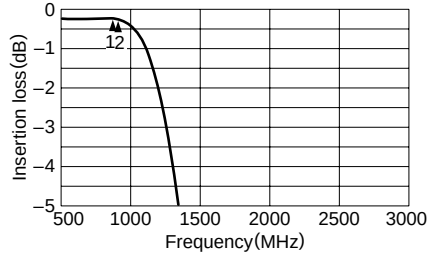
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

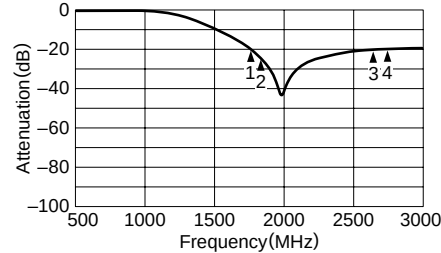
GSM

DEA160915LT-1160

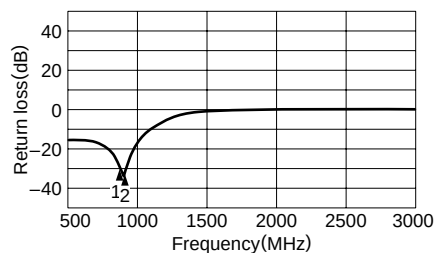
- 1: 880.0MHz, -0.238dB
2: 915.0MHz, -0.260dB



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

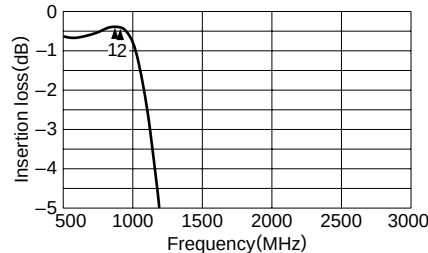


- 1: 880.0MHz, -30.972dB
2: 915.0MHz, -32.275dB

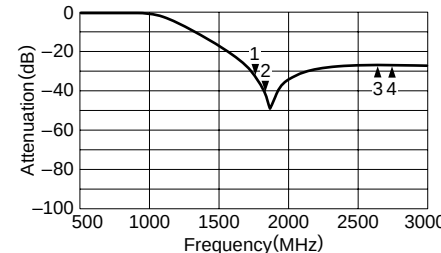


DEA160915LT-1156

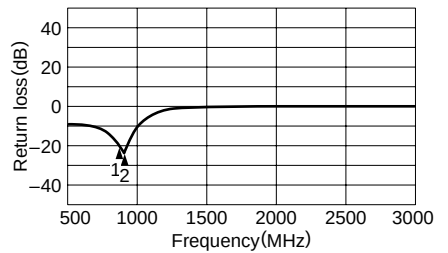
- 1: 880.0MHz, -0.371dB
2: 915.0MHz, -0.398dB



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

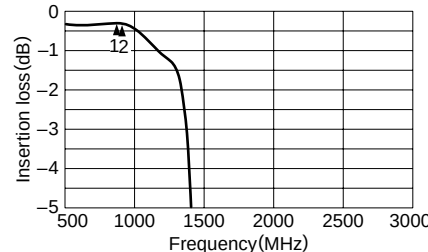


- 1: 880.0MHz, -21.279dB
2: 915.0MHz, -23.566dB

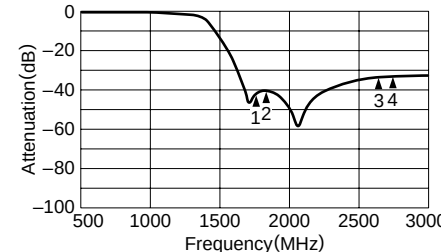


DEA160915LT-1169

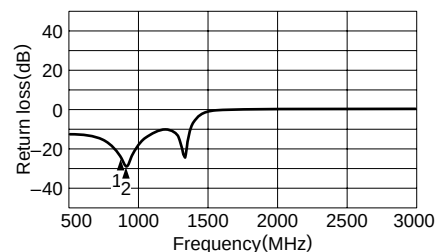
- 1: 880.0MHz, -0.276dB
2: 915.0MHz, -0.297dB



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



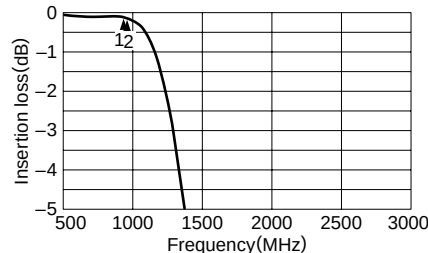
- 1: 880.0MHz, -25.276dB
2: 915.0MHz, -29.385dB



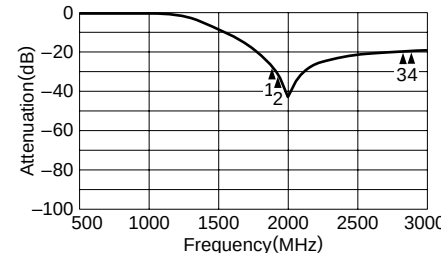
PDC800

DEA160960LT-1153

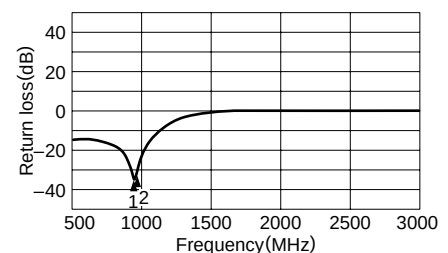
- 1: 940.0MHz, -0.130dB
2: 960.0MHz, -0.143dB



- 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

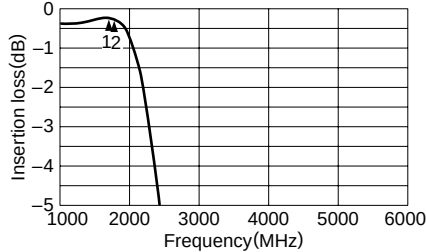
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

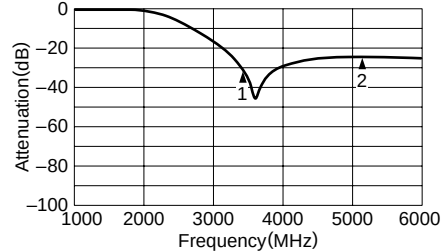
DCS1800

DEA161785LT-1158

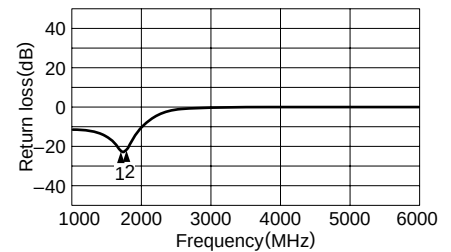
- 1: 1710.0MHz, -0.209dB
2: 1785.0MHz, -0.240dB



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

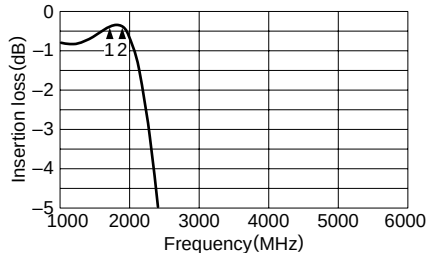


- 1: 1710.0MHz, -22.548dB
2: 1785.0MHz, -22.338dB

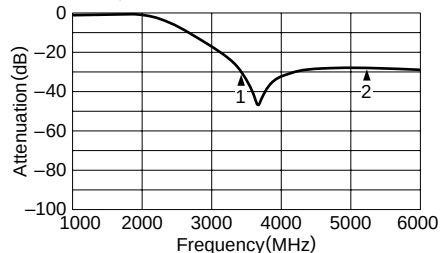


DEA161880LT-1154

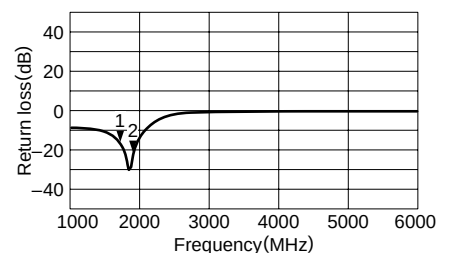
- 1: 1710.0MHz, -0.387dB
2: 1880.0MHz, -0.398dB



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



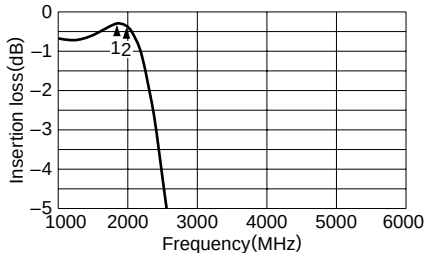
- 1: 1710.0MHz, -16.474dB
2: 1880.0MHz, -24.324dB



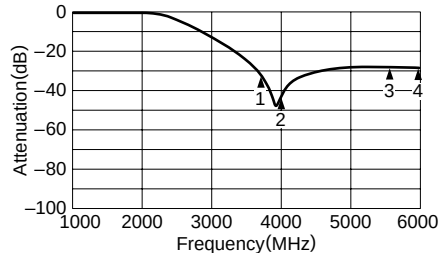
PCS1900

DEA161990LT-1155

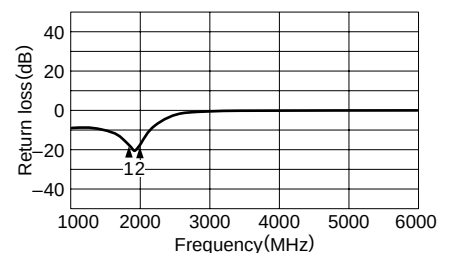
- 1: 1850.0MHz, -0.305dB
2: 1990.0MHz, -0.353dB



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

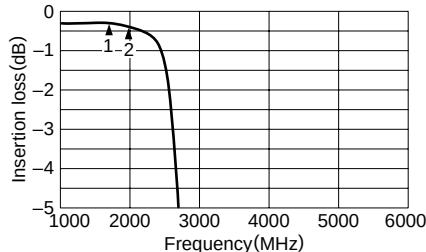


- 1: 1850.0MHz, -18.192dB
2: 1990.0MHz, -18.643dB

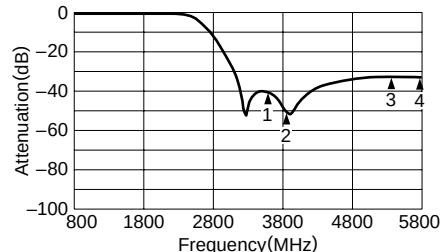


DEA161990LT-1182

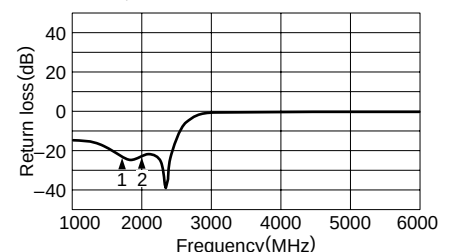
- 1: 1710.0MHz, -0.283dB
2: 1990.0MHz, -0.375dB



- 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

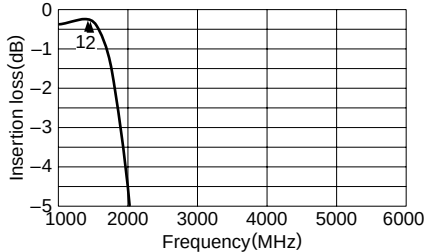
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

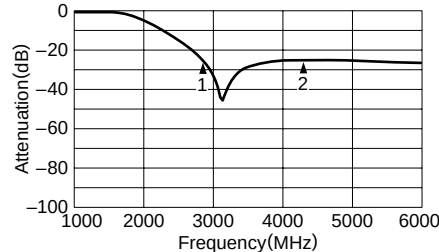
PDC1500

DEA161453LT-1152

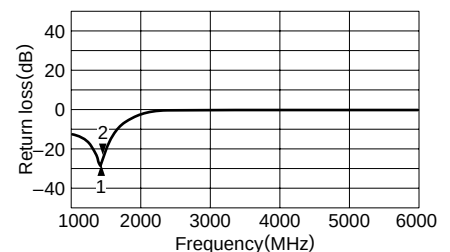
1: 1429.0MHz, -0.247dB
2: 1453.0MHz, -0.265dB



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



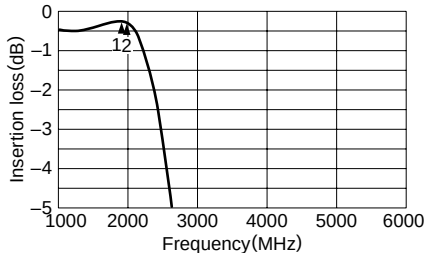
1: 1429.0MHz, -28.812dB
2: 1453.0MHz, -25.752dB



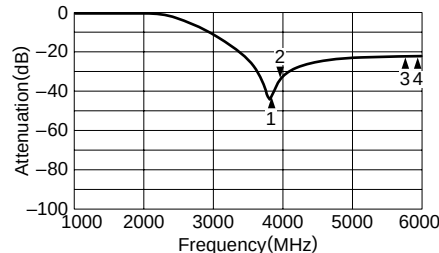
IMT-2000

DEA161980LT-1164

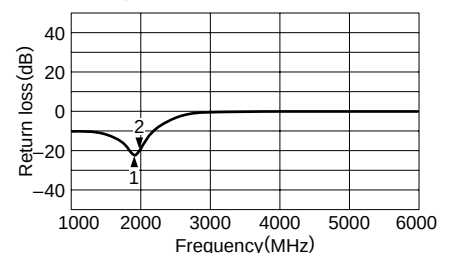
1: 1920.0MHz, -0.266dB
2: 1980.0MHz, -0.302dB



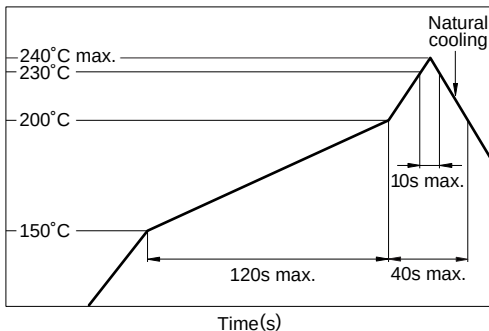
1: 3840.0MHz, -43.685dB 3: 5760.0MHz, -22.529dB
2: 3960.0MHz, -34.464dB 4: 5940.0MHz, -22.295dB



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



RECOMMENDED REFLOW SOLDERING CONDITIONS



APPLICATION EXAMPLES

DIGITAL CELLULAR

PDC1500

