

# Multilayer Band Pass Filters

For 5.0GHz W-LAN

## DEA Series

Type:            **DEA205425BT-1209B2 (2.0×1.25×0.9mm)**  
                     **DEA205437BT-1200 (2.0×1.25×0.9mm)**  
                     **DEA205375BT-2054A1 (2.0×1.25×0.95mm)**  
                     **DEA205425BT-2028A4 (2.0×1.25×0.95mm)**

Issue date:     November 2010

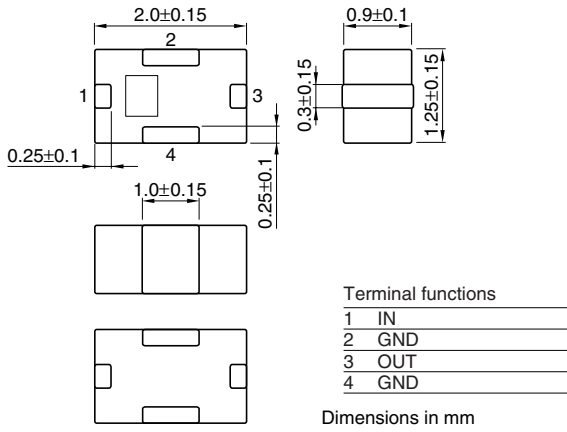
- All specifications are subject to change without notice.
  - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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# Multilayer Chip Band Pass Filters For 5.0GHz W-LAN

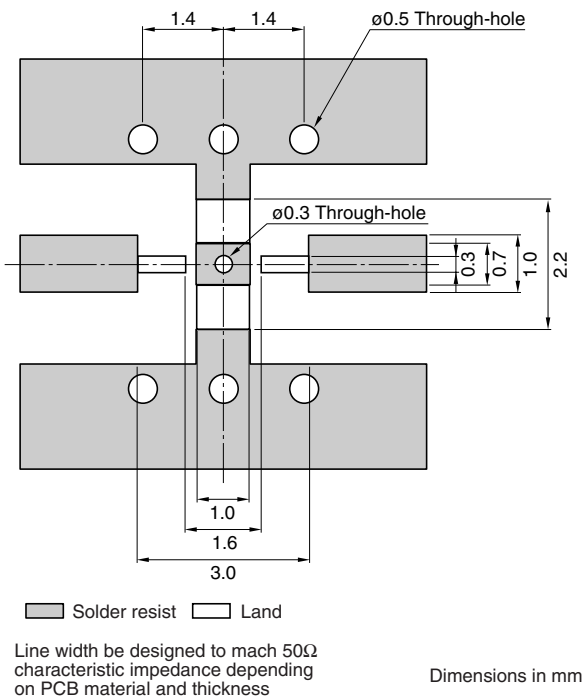
Conformity to RoHS Directive

DEA Series DEA205425BT-1209B2

## SHAPES AND DIMENSIONS



## RECOMMENDED PC BOARD PATTERNS



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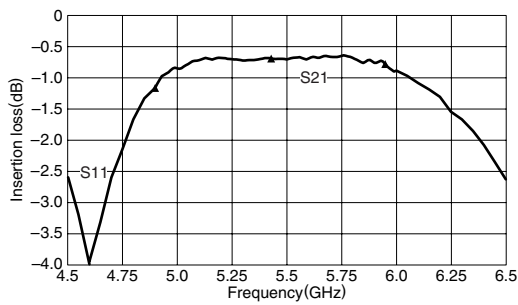
## ELECTRICAL CHARACTERISTICS

Item			Minimum value	Typical value	Maximum value
Center frequency	[5425MHz]		—	—	—
Insertion loss	[4900 to 5950MHz]	(dB)	—	1.1	1.5
Return loss	[4900 to 5950MHz]	(dB)	10	—	—
	[500 to 1900MHz]	(dB)	35	41	—
Attenuation	[2140 to 3300MHz]	(dB)	30	38	—
	[3450MHz]	(dB)	25	34	—
	[9800 to 11900MHz]	(dB)	17	25	—
Temperature range	Operating	(°C)	-40	—	+85
	Storage	(°C)	-40	—	+85

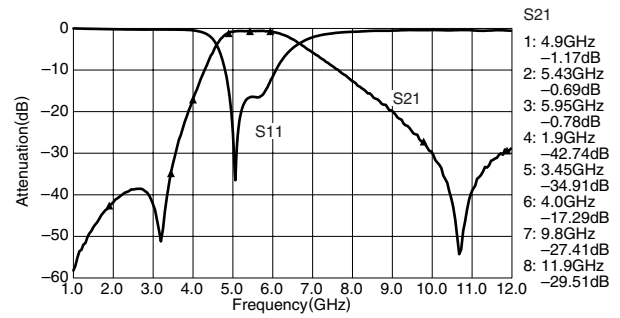
• Ta: +25°C

## FREQUENCY CHARACTERISTICS

### INSERTION LOSS



### ATTENUATION

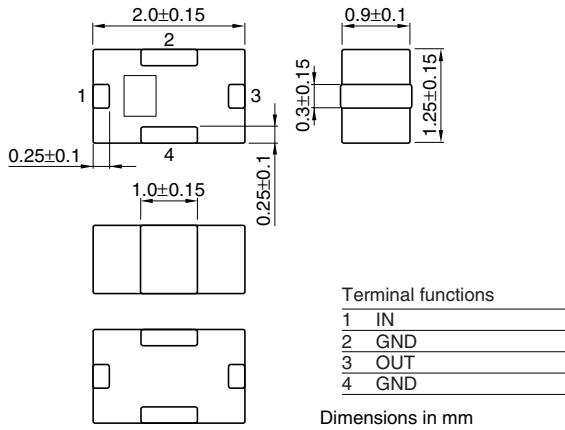


# Multilayer Chip Band Pass Filters For 5.0GHz W-LAN

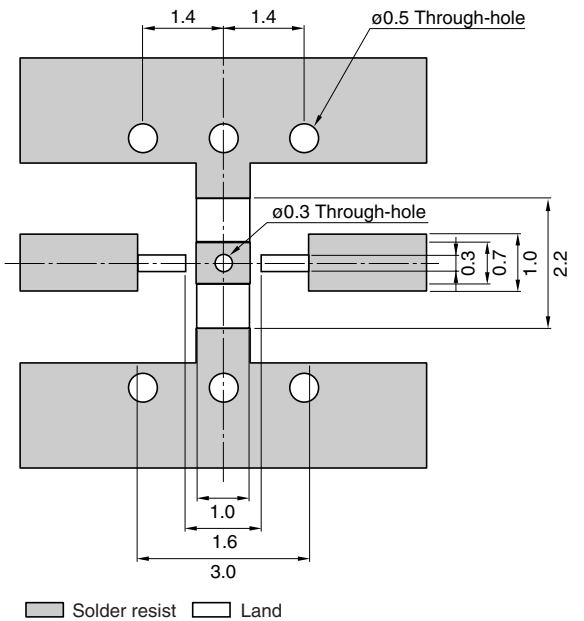
Conformity to RoHS Directive

DEA Series DEA205437BT-1200

## SHAPES AND DIMENSIONS



## RECOMMENDED PC BOARD PATTERNS



Line width be designed to match  $50\Omega$  characteristic impedance depending on PCB material and thickness

Dimensions in mm

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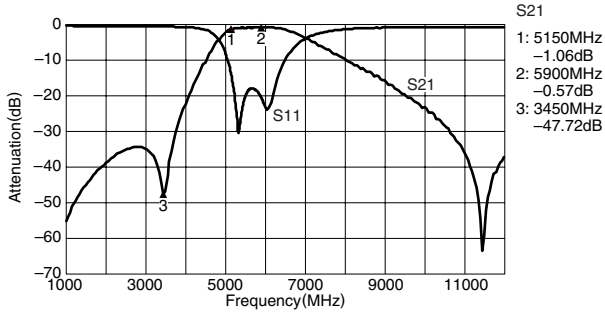
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## ELECTRICAL CHARACTERISTICS

Item			Minimum value	Typical value	Maximum value
Center frequency	[5525MHz]		—	—	—
Insertion loss	[5150 to 5900MHz]	(dB)	—	1.1	1.5
Return loss	[5150 to 5900MHz]	(dB)	10	—	—
Attenuation	[3450MHz]	(dB)	35	—	—
Temperature range	Operating	(°C)	-40	—	+85
	Storage	(°C)	-40	—	+85

• Ta: +25°C

## FREQUENCY CHARACTERISTICS



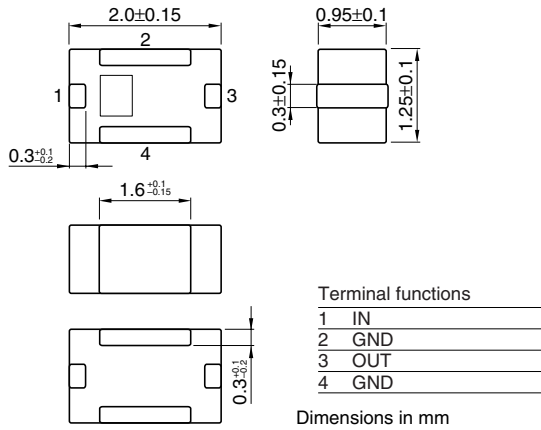
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# Multilayer Chip Band Pass Filters For 5.0GHz W-LAN

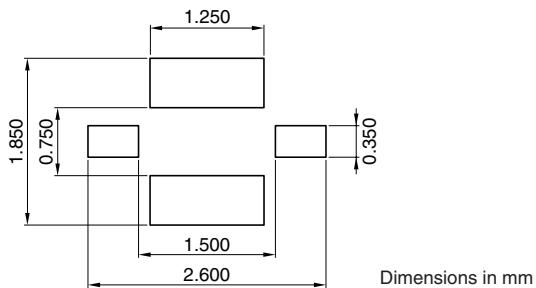
Conformity to RoHS Directive

DEA Series DEA205375BT-2054A1

## SHAPES AND DIMENSIONS



## RECOMMENDED PC BOARD PATTERNS



## ELECTRICAL CHARACTERISTICS

Item				Minimum value	Typical value	Maximum value
Insertion loss	[25°C]	[4900 to 5850MHz]	(dB)	—	—	2.2
	[-40 to +85°C]	[4900 to 5850MHz]	(dB)	—	—	2.5
VSWR		[4900 to 5850MHz]		—	—	2.2
		[340 to 1195MHz]	(dB)	38.0	—	—
Attenuation		[2140 to 3580MHz]	(dB)	19.0	—	—
		[6855 to 7150MHz]	(dB)	25.0	—	—
		[8570 to 8930MHz]	(dB)	20.0	—	—
Ripple		[4900 to 5850MHz]	(dB)	—	—	1.8
Temperature range	Operating		(°C)	-40	—	+85
	Storage		(°C)	-40	—	+85

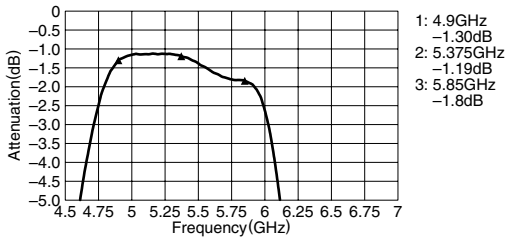
• Ta:+25°C

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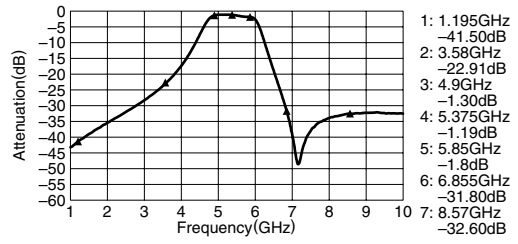
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### FREQUENCY CHARACTERISTICS

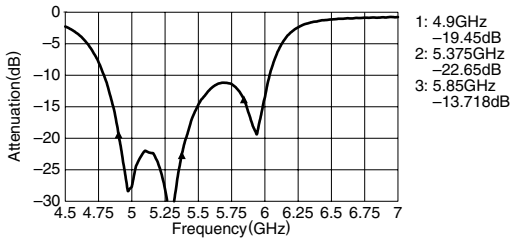
#### INSERTION LOSS



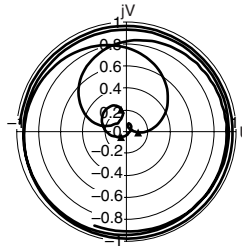
#### ATTENUATION



#### RETURN LOSS



#### VSWR

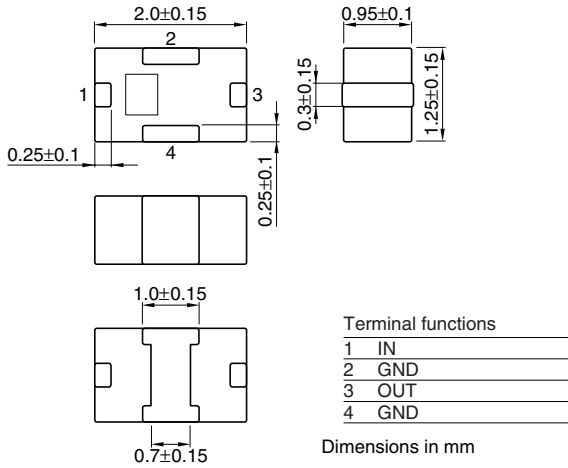


# Multilayer Chip Band Pass Filters For 5.0GHz W-LAN

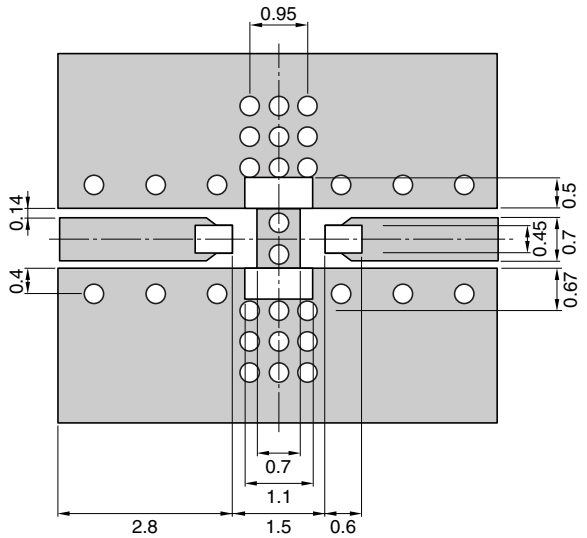
Conformity to RoHS Directive

DEA Series DEA205425BT-2028A4

## SHAPES AND DIMENSIONS



## RECOMMENDED PC BOARD PATTERNS



■ Solder resist □ Land

Line width be designed to mach  $50\Omega$  characteristic impedance depending on PCB material and thickness

Dimensions in mm

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

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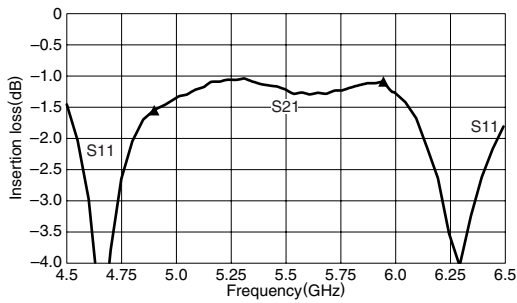
## ELECTRICAL CHARACTERISTICS

Item			Minimum value	Typical value	Maximum value
Center frequency	[5425MHz]		—	—	—
Insertion loss	[4900 to 5950MHz]	(dB)	—	1.6	2.0
Return loss	[4900 to 5950MHz]	(dB)	9	11	—
Attenuation	[1280 to 3300MHz]	(dB)	40	50	—
	[3300 to 4000MHz]	(dB)	25	33	—
	[4375 to 4465MHz]	(dB)	7	12	—
	[7300 to 8930MHz]	(dB)	14	18	—
Temperature range	Operating	(°C)	-40	—	+85
	Storage	(°C)	-40	—	+85

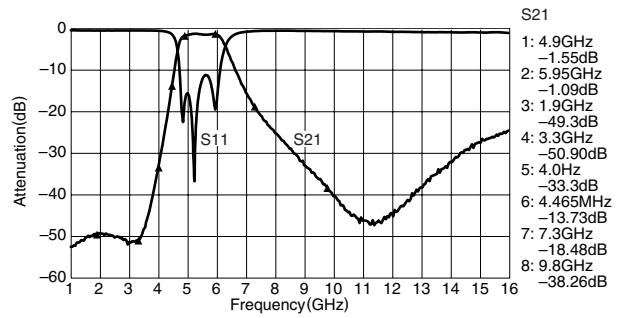
• Ta: +25°C

## FREQUENCY CHARACTERISTICS

### INSERTION LOSS



### ATTENUATION



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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