

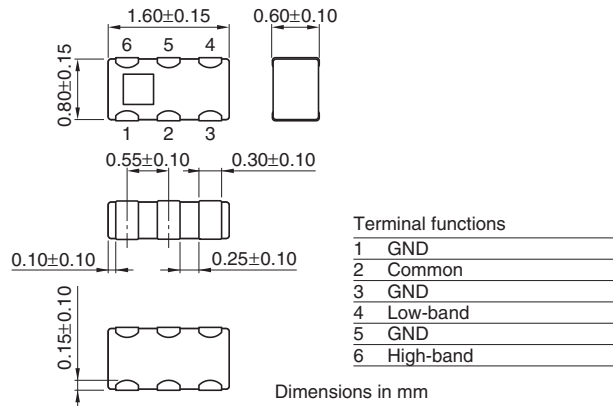
# Multilayer Chip Diplexers

## For AGSM\_EGSM-DCS\_PCS\_WCDMA

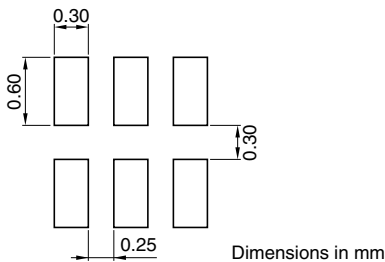
Conformity to RoHS Directive

DPX Series DPX162170DT-8122B1

### SHAPES AND DIMENSIONS



### RECOMMENDED PC BOARD PATTERNS



### ELECTRICAL CHARACTERISTICS

Item		Frequency range		Minimum value	Typical value	Maximum value
Low-Band						
Insertion loss	[+25°C]	824 to 960MHz	(dB)	—	0.31	0.5
	[-40 to +85°C]	824 to 960MHz	(dB)	—	—	0.65
Attenuation		1710 to 2170MHz	(dB)	15	19.4	—
VSWR		824 to 960MHz		—	1.19	1.5
High-Band						
Insertion loss	[+25°C]	1710-1990MHz	(dB)	—	0.55	0.70
		2110-2170MHz	(dB)	—	0.33	0.55
	[-40 to +85°C]	1710-1990MHz	(dB)	—	—	0.90
		2110-2170MHz	(dB)	—	—	0.65
Attenuation		824 to 960MHz	(dB)	20	24.2	—
VSWR		1710 to 1990MHz		—	1.37	1.7
		2110 to 2170MHz		—	1.23	1.7
Temperature range	Operating		(°C)	-40	—	+85
	Storage		(°C)	-40	—	+85

- Ta: +25±5°C

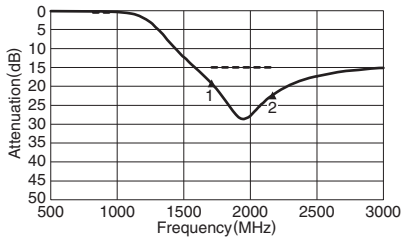
- We recommend to terminate for all port with 50Ω at all times.

- 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.

- All specifications are subject to change without notice.

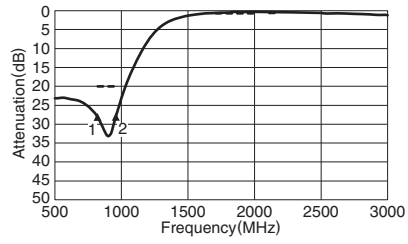
### FREQUENCY CHARACTERISTICS

#### Low-BAND PORT ATTENUATION



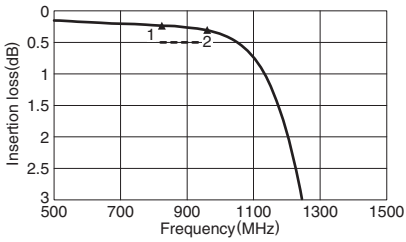
- 1: 1710MHz  
19.35dB
- 2: 2170MHz  
22.18dB

#### High-BAND PORT ATTENUATION



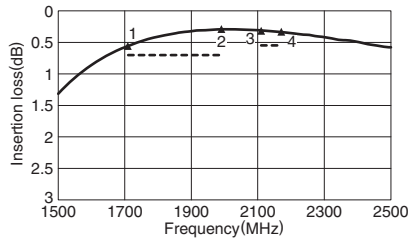
- 1: 824MHz  
26.11dB
- 2: 960MHz  
27.65dB

#### Low-BAND PORT INSERTION LOSS



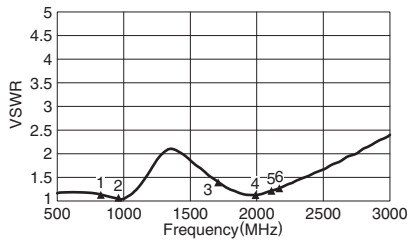
- 1: 824MHz  
0.23dB
- 2: 960MHz  
0.31dB

#### High-BAND PORT INSERTION LOSS



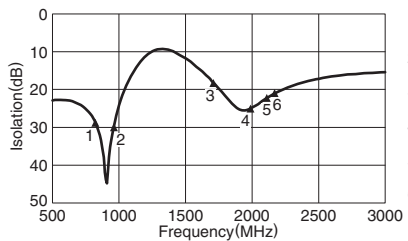
- 1: 1710MHz  
0.55dB
- 2: 1990MHz  
0.29dB
- 3: 2110MHz  
0.31dB
- 4: 2170MHz  
0.33dB

#### COMMON PORT VSWR



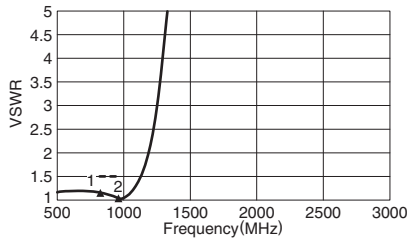
- 1: 824MHz  
1.14
- 2: 960MHz  
1.04
- 3: 1710MHz  
1.41
- 4: 1990MHz  
1.13
- 5: 2110MHz  
1.22
- 6: 2170MHz  
1.27

#### ISOLATION



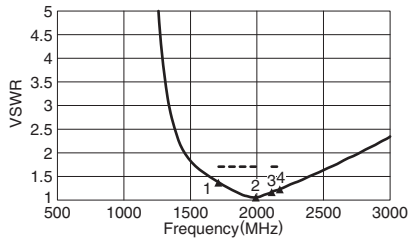
- 1: 824MHz  
28.6dB
- 2: 960MHz  
29.7dB
- 3: 1710MHz  
18.2dB
- 4: 1990MHz  
25.0dB
- 5: 2100MHz  
22.3dB
- 6: 2170MHz  
21.0dB

#### Low-BAND PORT VSWR



- 1: 824MHz  
1.16
- 2: 960MHz  
1.04

#### High-BAND PORT VSWR



- 1: 1710MHz  
1.37
- 2: 1990MHz  
1.05
- 3: 2110MHz  
1.16
- 4: 2170MHz  
1.23

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