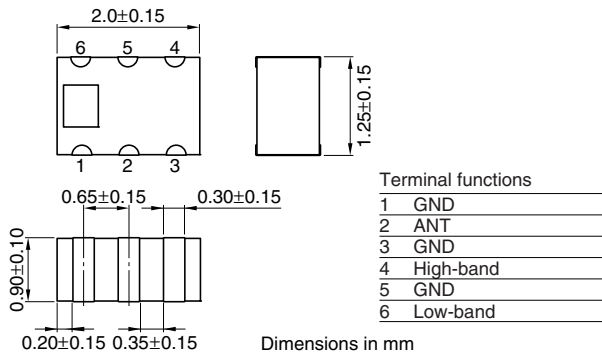


# Multilayer Chip Diplexers For UMTS & LTE

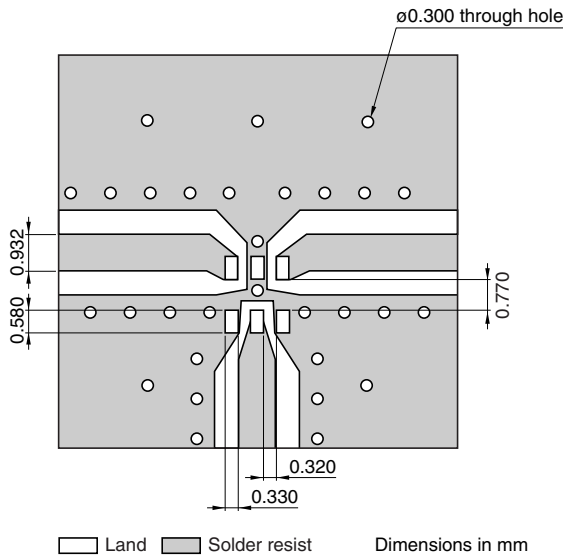
Conformity to RoHS Directive

DPX Series DPX202690DT-4049A2

## SHAPES AND DIMENSIONS



## RECOMMENDED PC BOARD PATTERNS



## ELECTRICAL CHARACTERISTICS

Item	Port	Frequency range		Minimum value	Typical value	Maximum value
Insertion loss	Low-Band	704 to 960MHz	(dB)	—	0.24	0.30
		1710 to 2170MHz	(dB)	—	0.38	0.50
	High-Band	2170 to 2690MHz	(dB)	—	0.83	1.20
Attenuation	Low-Band	1710 to 2170MHz	(dB)	15	17.7	—
		2170 to 2690MHz	(dB)	13	16.8	—
	High-Band	704 to 824MHz	(dB)	17	20.4	—
		824 to 960MHz	(dB)	20	22.8	—
		ANT	704 to 824MHz		—	1.31
VSWR	ANT	824 to 960MHz		—	1.24	1.5
		1710 to 2170MHz		—	1.53	1.7
	Low-Band	2170 to 2690MHz		—	2.14	2.5
		704 to 824MHz		—	1.29	1.7
		824 to 960MHz		—	1.23	1.5
High-Band	1710 to 2170MHz		—	1.51	1.7	
Power capacity			(dBm)	—	—	+35
Temperature range	Operating		(°C)	-40	—	+85
	Storage		(°C)	-40	—	+85

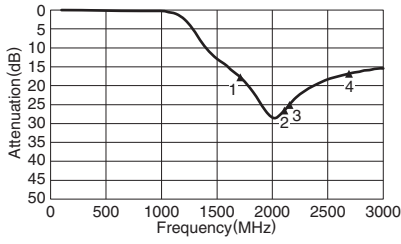
• Ta:+25°C

• 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.

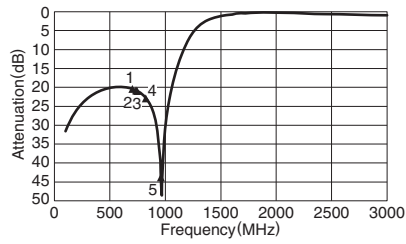
### FREQUENCY CHARACTERISTICS

#### Low-BAND PORT S21



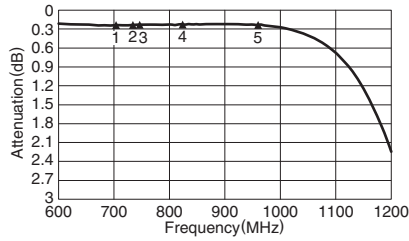
- 1: 1710MHz  
17.71dB
- 2: 2110MHz  
26.56dB
- 3: 2155MHz  
25.15dB
- 4: 2690MHz  
16.83dB

#### High-BAND PORT S31



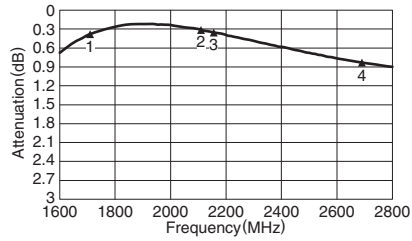
- 1: 704MHz  
20.40dB
- 2: 734MHz  
20.69dB
- 3: 746MHz  
20.88dB
- 4: 824MHz  
22.85dB
- 5: 960MHz  
43.72dB

#### Low-BAND PORT S21



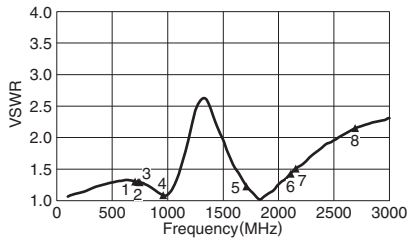
- 1: 704MHz  
0.237dB
- 2: 734MHz  
0.238dB
- 3: 746MHz  
0.231dB
- 4: 824MHz  
0.228dB
- 5: 960MHz  
0.237dB

#### High-BAND PORT S31



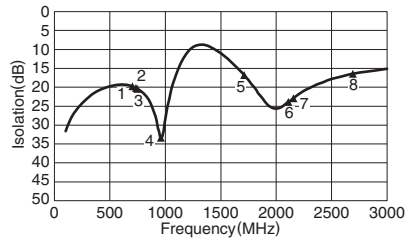
- 1: 1710MHz  
0.380dB
- 2: 2110MHz  
0.310dB
- 3: 2115MHz  
0.351dB
- 4: 2690MHz  
0.826dB

#### COMMON PORT VSWR S11



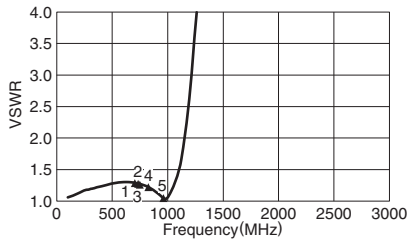
- 1: 704MHz  
1.31
- 2: 734MHz  
1.30
- 3: 746MHz  
1.29
- 4: 960MHz  
1.06
- 5: 1710MHz  
1.23
- 6: 2110MHz  
1.44
- 7: 2155MHz  
1.51
- 8: 2690MHz  
2.14

#### ISOLATION S23



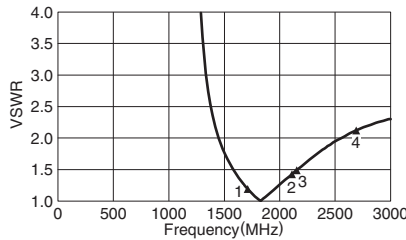
- 1: 704MHz  
19.8dB
- 2: 734MHz  
20.1dB
- 3: 746MHz  
20.2dB
- 4: 960MHz  
33.4dB
- 5: 1710MHz  
16.8dB
- 6: 2110MHz  
23.9dB
- 7: 2155MHz  
23.0dB
- 8: 2690MHz  
16.5dB

#### Low-BAND PORT VSWR S22



- 1: 704MHz  
1.29
- 2: 734MHz  
1.29
- 3: 746MHz  
1.28
- 4: 824MHz  
1.23
- 5: 960MHz  
1.05

#### High-BAND PORT VSWR S33



- 1: 1710MHz  
1.20
- 2: 2110MHz  
1.43
- 3: 2155MHz  
1.49
- 4: 2690MHz  
2.13

• All specifications are subject to change without notice.