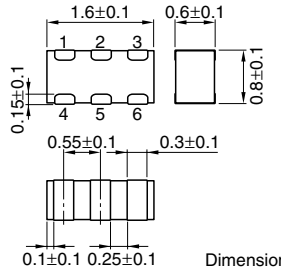
TDK

Multilayer Chip Diplexers
For EGSM & AGSM/PCS Tx-Rx-GPS

Conformity to RoHS Directive

DPX Series DPX161576DT-8011B1

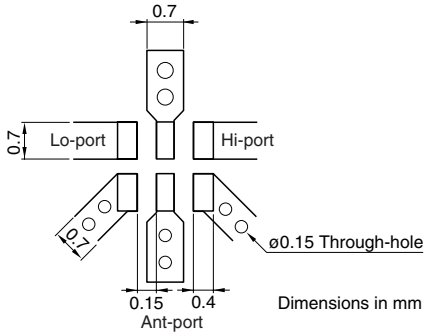
SHAPES AND DIMENSIONS



Terminal functions	
1	iDEN port
2	GND
3	GPS port
4	GND
5	Antenna port
6	GND

Dimensions in mm

RECOMMENDED PC BOARD PATTERNS



Dimensions in mm

This width is 50Ω.
Micro-strip line for 0.4mm thick glass-epoxy substrate.

ELECTRICAL CHARACTERISTICS

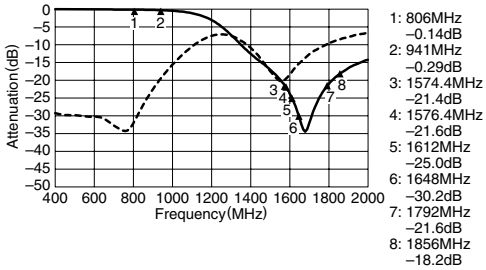
Item			Minimum value	Typical value	Maximum value
iDEN port to Ant port					
iDEN pass band		MHz	806	—	941
Insertion loss	[25°C]	dB	—	—	0.6
	[–30 to +85°C]	dB	—	—	0.7
iDEN port return loss		dB	14	—	—
Ant port return loss		dB	14	—	—
Attenuation	1575MHz	dB	16	—	—
	1612 to 1648MHz	dB	18	—	—
	1792 to 1856MHz	dB	14	—	—
	2 to 3GHz	dB	5	—	—
GPS port to Ant port					
GPS pass band		MHz	1574.42	—	1576.42
Insertion loss	[25°C]	dB	—	—	0.7
	[–30 to +85°C]	dB	—	—	0.8
GPS port return loss		dB	14	—	—
Ant port return loss		dB	14	—	—
Attenuation	806 to 928MHz	dB	20	—	—
GPS port to iDEN port					
Low band attenuation	806 to 928MHz	dB	20	—	—
Attenuation	1575MHz	dB	16	—	—
High band attenuation	1612 to 1648MHz	dB	18	—	—
	1792 to 1856MHz	dB	14	—	—

• Ta:+25°C

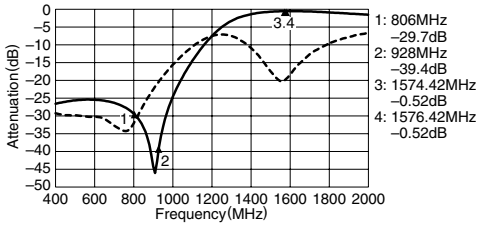
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

FREQUENCY CHARACTERISTICS

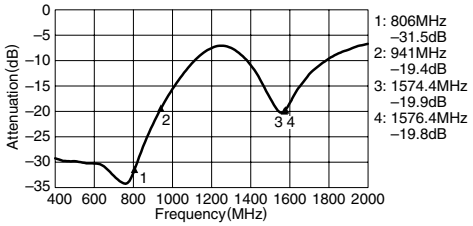
Lo-BAND PORT S21



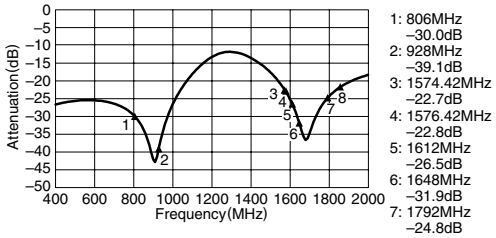
Hi-BAND PORT S31



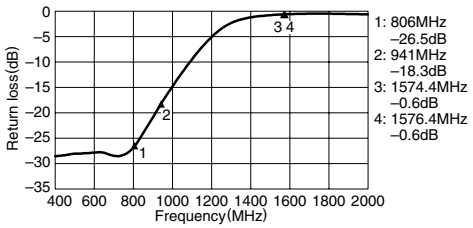
COMMON PORT RETURN LOSS S11



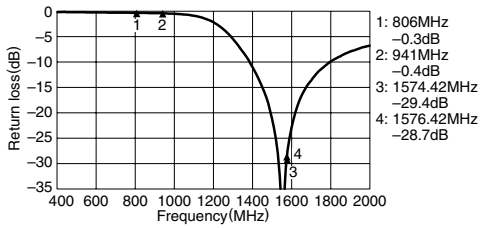
ISOLATION S23



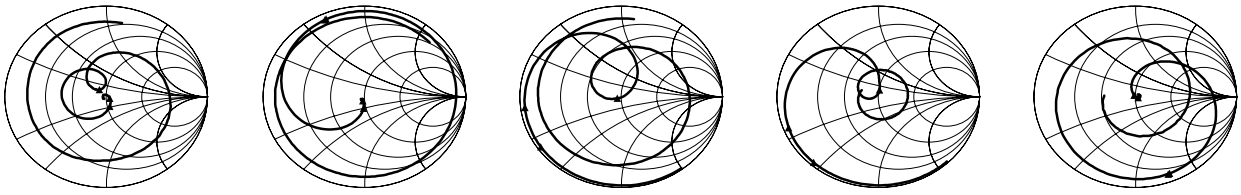
Lo-BAND PORT RETURN LOSS S22



Hi-PORT RETURN LOSS S33



SMITH CHARTS



S11 S22 S33 S21 S31

- All specifications are subject to change without notice.