

## Excellent Integrated System Limited

Stocking Distributor

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[TDK Corporation](#)  
[DPX201990DT-4011D1](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# Multilayer Diplexers

For GSM850/GSM900/DCS/PCS Tx & Rx

## DPX Series

**Type:** DPX201990DT-4011D1 (2.0×1.25×1.0mm max.)

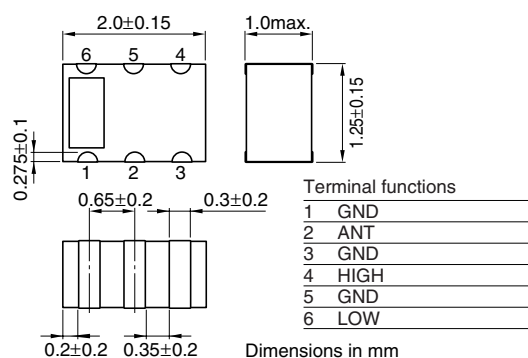
**Issue date:** December 2010

# Multilayer Chip Diplexers For GSM850/GSM900/DCS/PCS

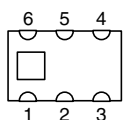
Conformity to RoHS Directive

## DPX Series DPX201990DT-4011D1

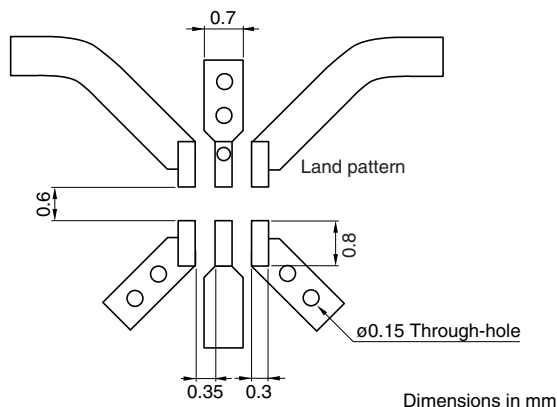
### SHAPES AND DIMENSIONS



### CIRCUIT DIAGRAM



### RECOMMENDED PC BOARD PATTERNS



Line width be designed to match 50Ω characteristic impedance depending on PCB material and thickness.

### ELECTRICAL CHARACTERISTICS

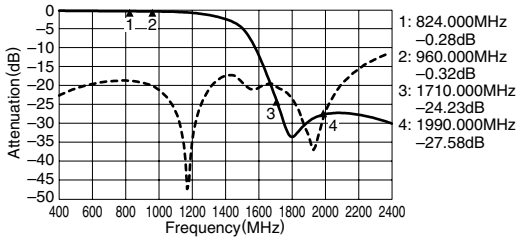
Item	Port	Frequency range		Minimum value	Typical value	Maximum value
Insertion loss	Lo-band	824 to 960MHz	(dB)	—	—	0.5
	Hi-band	1710 to 1990MHz	(dB)	—	—	0.55
Return loss	ANT	824 to 960MHz	(dB)	10.0	—	—
	ANT	1710 to 1990MHz	(dB)	10.0	—	—
Attenuation	Hi-band	824 to 960MHz	(dB)	20.0	—	—
	Lo-band	1710 to 1990MHz	(dB)	20.0	—	—
Temperature range		Operating	(°C)	-40	—	+85
		Storage	(°C)	-40	—	+85

• Ta: +25°C

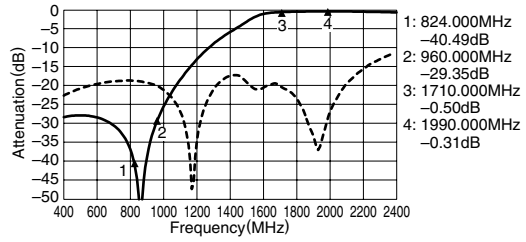
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

**FREQUENCY CHARACTERISTICS**

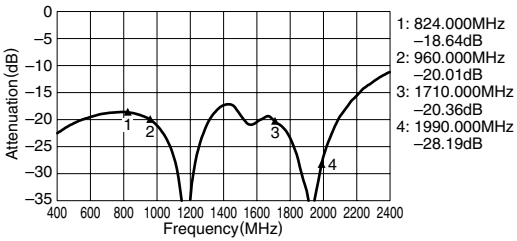
**Lo-BAND PORT S21**



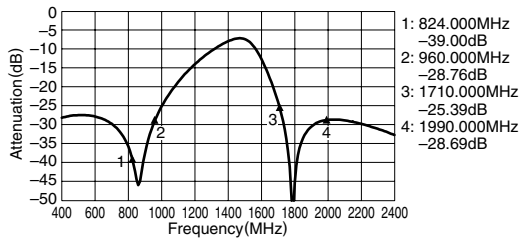
**Hi-BAND PORT S31**



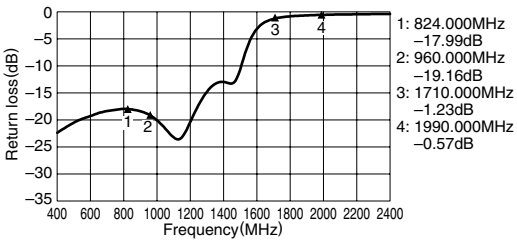
**COMMON PORT RETURN LOSS S11**



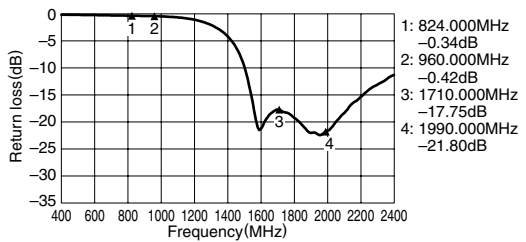
**ISOLATION S23**



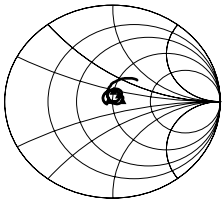
**Lo-BAND PORT RETURN LOSS S22**



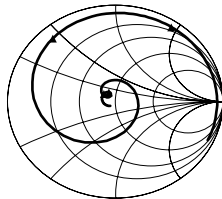
**Hi-PORT RETURN LOSS S33**



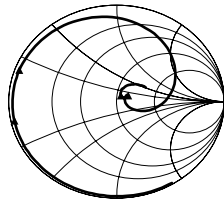
**SMITH CHARTS**



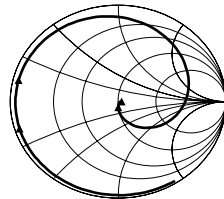
**S11**



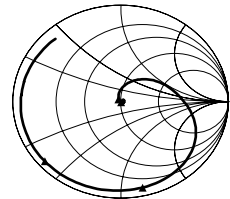
**S22**



**S33**



**S21**



**S31**