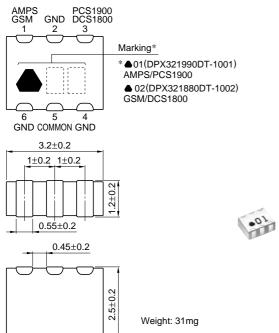
# **RF Components** Diplexers For Dual Band

## FEATURES

- Sheet multilayer construction has resulted in the miniaturized, light weight chip diplexers(L3.2×W2.5×T1.2mm, 31mg).
- The industry's smallest class diplexers maintain high grade, high stability characteristics for dual band/dual mode cellular transmission and reception. These diplexers have good separation characteristics, achieving both low insertion loss and high stopband attenuation.
- This series provides a choice of two product types corresponding to the most typical dual band systems: AMPS/PCS1900(USA) and GSM/DCS1800(Europe).
- Since these diplexers are provided with outstanding resistance to damage from the physical and chemical environment, stable characteristics are maintained, even for cellular applications under severe conditions.

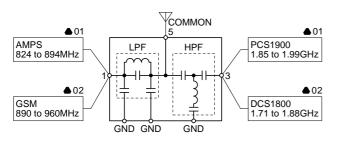
### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



.02

Dimensions in mm

# EQUIVALENT CIRCUIT DIAGRAM



# APPLICATIONS

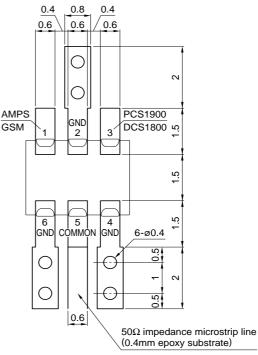
Dual band/dual mode cellular use

#### **TEMPERATURE RANGES**

DP-X32-10 Series

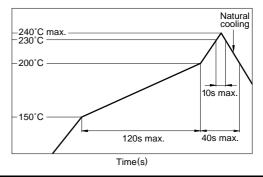
Operating	–30 to +80°C	
Storage	–40 to +85°C	

### RECOMMENDED PC BOARD PATTERN REFLOW SOLDERING



Dimensions in mm

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



# **RF Components**

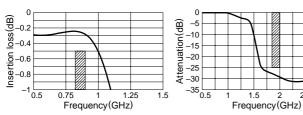
Diplexers For Dual Band

# ELECTRICAL CHARACTERISTICS

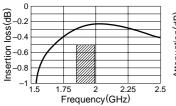
DPX321990DT-100	)1
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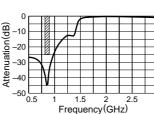
AMPS/PCS1900 Dual Band System	
824 to 894MHz	0.5dB max.
1.85 to 1.99GHz	0.5dB max.
1.85 to 1.99GHz	25dB min.
824 to 894MHz	25dB min.
	824 to 894MHz 1.85 to 1.99GHz 1.85 to 1.99GHz

## TYPICAL ELECTRICAL CHARACTERISTICS FREQUENCY CHARACTERISTICS DPX321990DT-1001 COMMON to AMPS



### COMMON to PCS1900





2.5

# APPLICATION EXAMPLE

#### DPX321880DT-1002

DP-X32-10 Series

Application	GSM/DCS1800 Dual Band System	
Insertion loss		
COMMON to GSM	890 to 960MHz	0.7dB max.
COMMON to DCS1800	1.71 to 1.88GHz	0.7dB max.
Stop band attenuation		
COMMON to GSM	1.71 to 1.88GHz	23dB min.
COMMON to DCS1800	890 to 960MHz	23dB min.

# FREQUENCY CHARACTERISTICS DPX321880DT-1002 COMMON to GSM

