



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Multilayer Band Pass Filter (Balance Output Type) (2in1)

For 869-960MHz / 1805-2025MHz

# DEA211898BT-9033B1

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**2.0x1.5mm**

\* Dimensions Code JIS

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# Multilayer Band Pass Filter (Balance Output Type) (2in1)

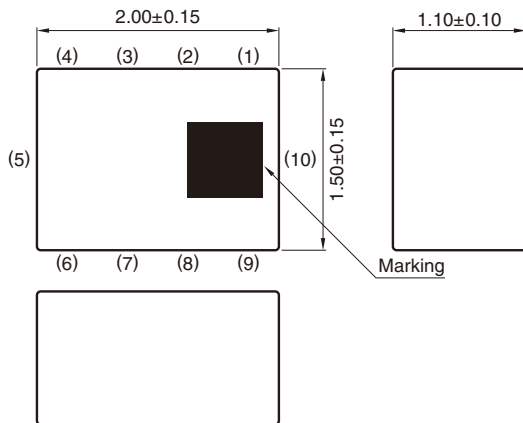
Conformity to RoHS Directive

For 869-960MHz / 1805-2025MHz

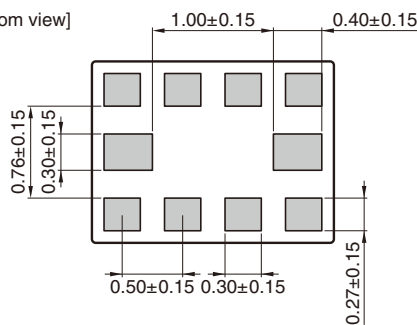
## DEA211898BT-9033B1

### SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

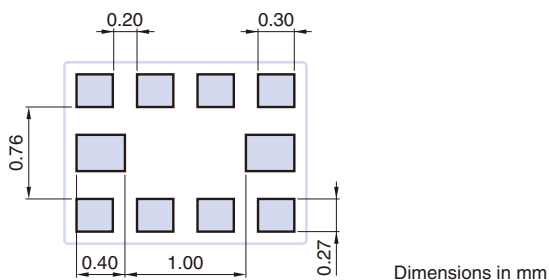


## Terminal functions

1	GSM850/900(Unbalanced port)
2	GND
3	GND
4	GSM1800/1900(Unbalanced port)
5	GND
6	GSM1800/1900(Balanced port)
7	GSM1800/1900(Balanced port)
8	GSM850/900(Balanced port)
9	GSM850/900(Balanced port)
10	GND

Dimensions in mm

### RECOMMENDED LAND PATTERN



Dimensions in mm

RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. <http://product.tdk.com/en/environment/rohs/>

- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

## DEA211898BT-9033B1

## ELECTRICAL CHARACTERISTICS

### Band1

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Unbalanced Port Characteristic Impedance ( $\Omega$ )			50 (Nominal)	
Balanced Port Characteristic Impedance ( $\Omega$ )			200 (Nominal)	
Insertion Loss (dB)	869 to 960	—	1.35	1.5
Attenuation (dB)	434.5 to 480	15	17.6	—
	1738 to 1920	20	21.6	—
	2607 to 2880	20	25.6	—
Amplitude Balance (dB)	869 to 960	-1.0	0.51	1.0
Phase Balance (deg.)	869 to 960	170	176.4	190

· Ta: +25±5°C

### Band2

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Unbalanced Port Characteristic Impedance ( $\Omega$ )			50 (Nominal)	
Balanced Port Characteristic Impedance ( $\Omega$ )			200 (Nominal)	
Insertion Loss (dB)	1805 to 2025	—	1.60	1.9
Attenuation (dB)	902.5 to 1012.5	16.5	18.3	—
	2400 to 2500	15	21.0	—
	3610 to 4050	20	22.5	—
	5415 to 6000	13	19.7	—
Amplitude Balance (dB)	1805 to 2025	-1.5	0.96	1.5
Phase Balance (deg.)	1805 to 2025	170	176.4	190

· Ta: +25±5°C

## TEMPERATURE RANGE

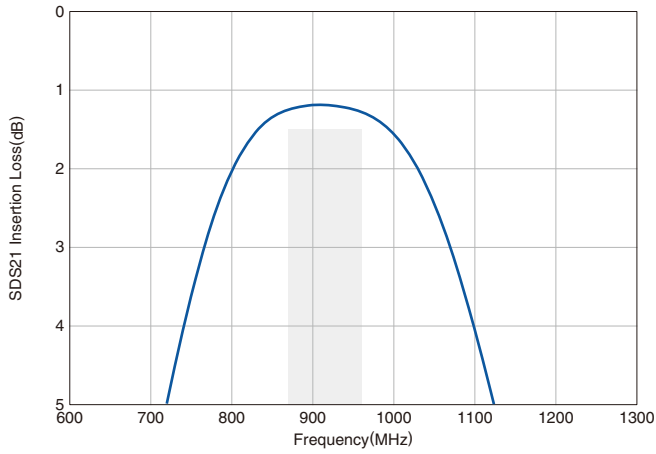
Operating temperature (°C)	Storage temperature (°C)
-40 to +85	-40 to +85

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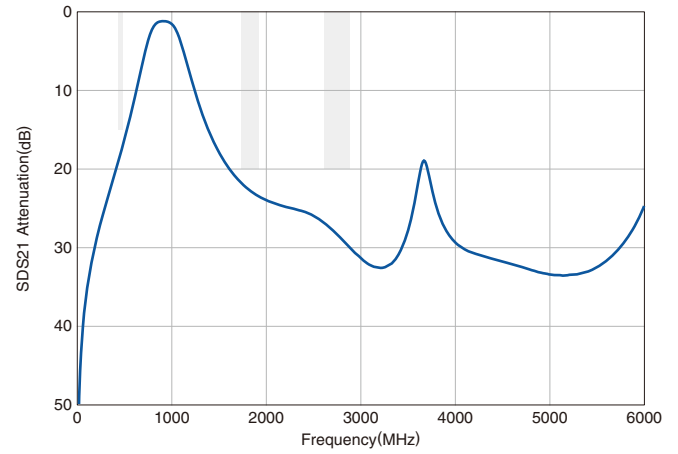
# DEA211898BT-9033B1

## FREQUENCY CHARACTERISTICS (Band1)

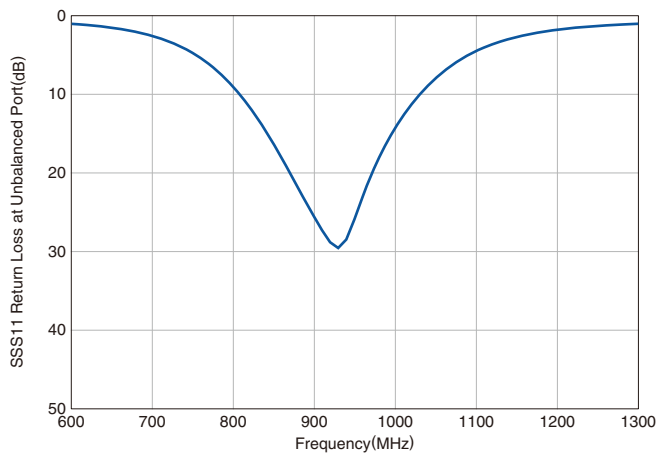
### SDS21 INSERTION LOSS



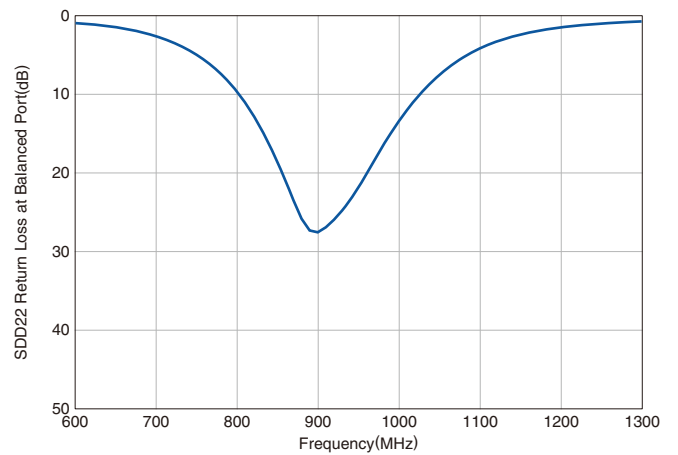
### SDS21 ATTENUATION



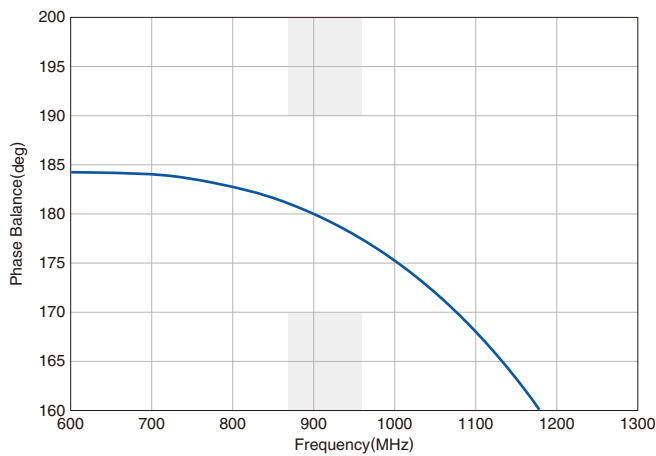
### SSS11 RETURN LOSS at UNBALANCE PORT



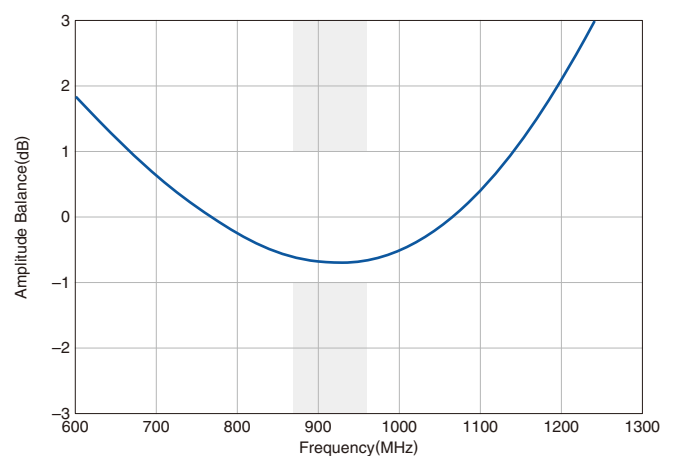
### SDD22 RETURN LOSS at BALANCE PORT



### PHASE BALANCE



### AMPLITUDE BALANCE

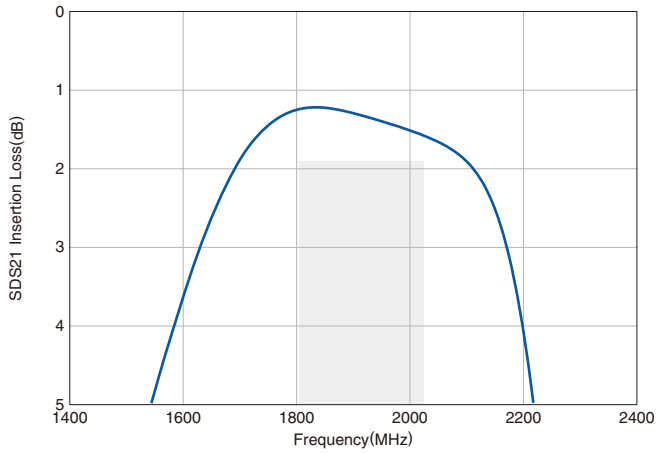


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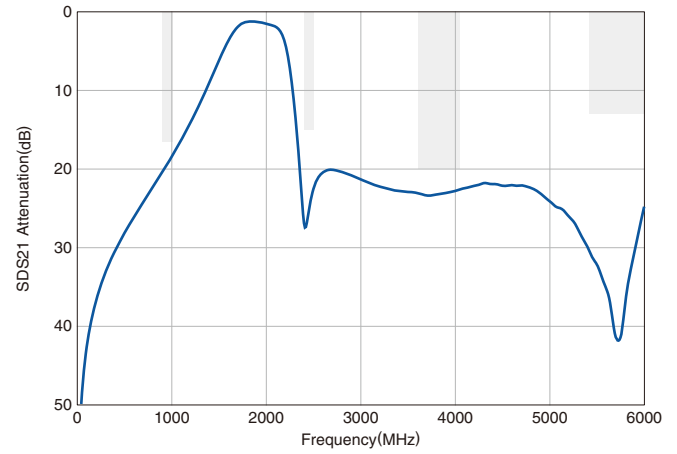
# DEA211898BT-9033B1

## FREQUENCY CHARACTERISTICS (Band2)

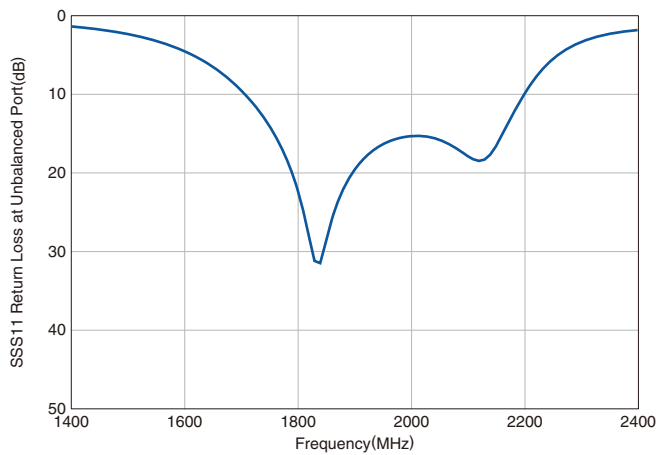
SDS21 INSERTION LOSS



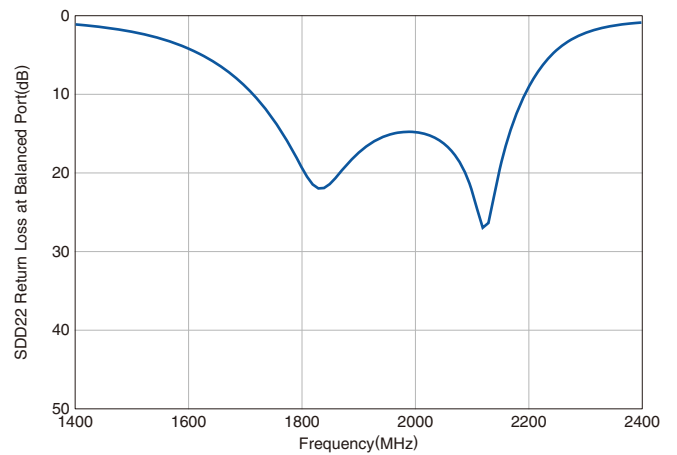
SDS21 ATTENUATION



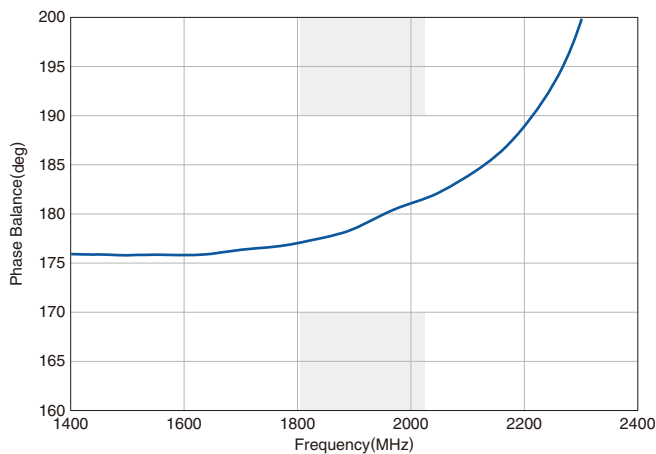
SSS11 RETURN LOSS at UNBALANCE PORT



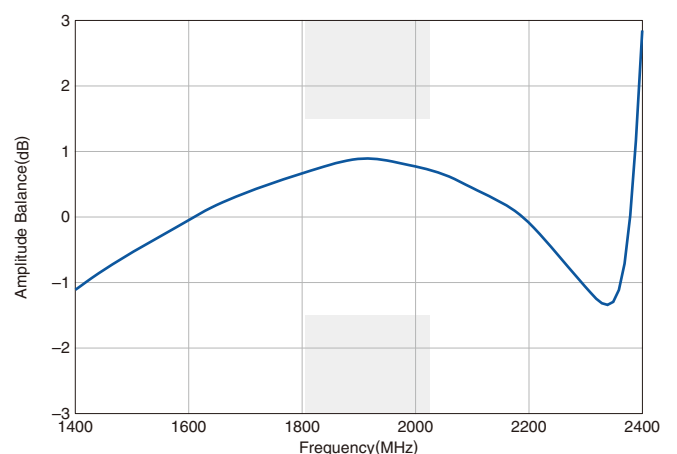
SDD22 RETURN LOSS at BALANCE PORT



PHASE BALANCE

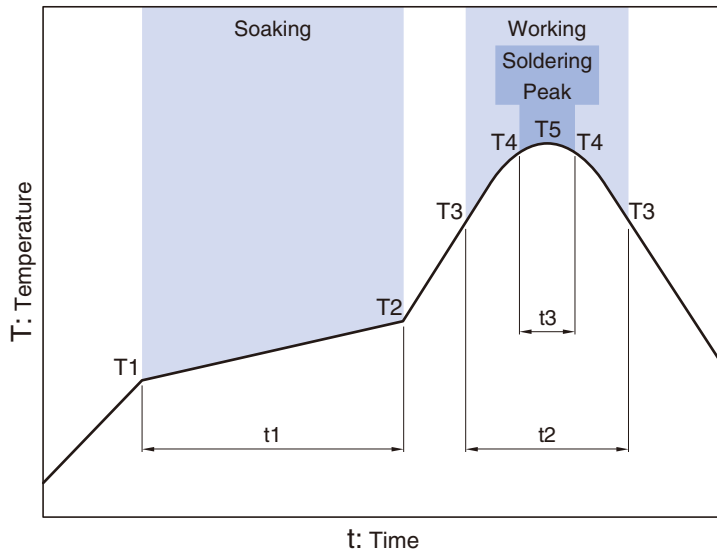


AMPLITUDE BALANCE



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**RECOMMENDED REFLOW PROFILE**


Soaking			Working		Soldering Peak		
Temp.	Temp.	Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120s	230°C	more than 30s	247 to 253°C	within 10s	260°C max.

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## REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

### SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

#### REMINDERS

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this catalog.

- |   |  |
|---|--|
| (1) Aerospace/Aviation equipment                                  | (8) Public information-processing equipment                                  |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment   |
| (3) Medical equipment   | (10) Electric heating apparatus, burning equipment                           |
| (4) Power-generation control equipment                            | (11) Disaster prevention/crime prevention equipment                          |
| (5) Atomic energy-related equipment                               | (12) Safety equipment  |
| (6) Seabed equipment  | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment                              |  |

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.