

### GENERAL DESCRIPTION RFAP TECHNOLOGY

The DB0603N 3dB 90° Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The RFAP LGA 3dB 90° Coupler will be offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

### RoHS

### **FEATURES**

- · Miniature 0603 size
- · Low I. Loss
- · High Isolation
- · Surface Mountable
- · RoHS Compliant
- Supplied on T&R
- Power Rating: 10W RF Continuous

### LAND GRID ARRAY ADVANTAGES:

- · Inherent Low Profile
- · Self Alignment during Reflow
- · Excellent Solderability
- · Low Parasitics
- · Better Heat Dissipation

### **APPLICATIONS**

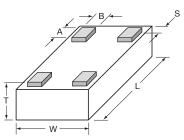
- 4G LTE
- 5G LTE
- · Base Stations.
- Automotive
- Industrial
- Balanced Amplifiers and Signal Distribution in Wireless Communications

### **DIMENSIONS:**

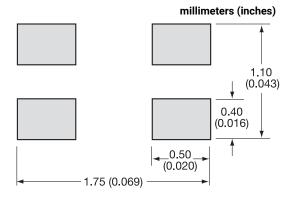
### millimeters (inches)

| L | 1.60±0.10     |
|---|---------------|
|   | (0.063±0.004) |
| w | 0.84±0.10     |
|   | (0.033±0.004) |
| Т | 0.60±0.10     |
|   | (0.024±0.004) |
| Α | 0.25±0.05     |
|   | (0.010±0.002) |
| В | 0.20±0.05     |
|   | (0.008±0.002) |
| s | 0.05±0.05     |
|   | (0.002±0.002) |

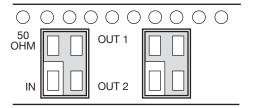
### **BOTTOM VIEW**



### **RECOMMENDED PAD LAYOUT DIMENSIONS:**



### **ORIENTATION IN TAPE**



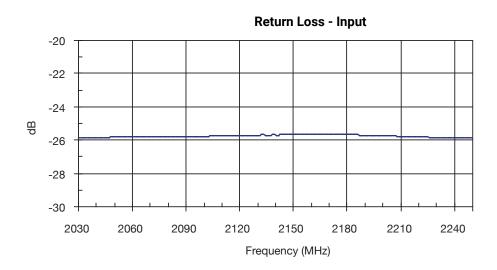
### **ELECTRICAL PARAMETERS**

| Part Number Frequency N |      | ncy MHz | Port<br>Impedance<br>Ω | Return Loss [dB] |      | Isolation [dB] |      | Insertion Loss [dB] |      | Ampltidue<br>Balance<br>[dB] |      | Phase Balance<br>(Relative to 90°)<br>Deg |     | Power<br>Handing<br>Watts |
|-------------------------|------|---------|------------------------|------------------|------|----------------|------|---------------------|------|------------------------------|------|---|-----|---------------------------|
|                         | Min. | Max.    | Тур.                   | Min.             | Тур. | Min.           | Тур. | Тур.                | Max. | Тур.                         | Max. | Тур.                                      | Max | Max.                      |
| DB0603N2140ANTR         | 2040 | 2240    | 50                     | 15               | 26   | 15             | 23   | 0.30                | 0.40 | 0.50                         | 0.80 | 2   | 3   | 10                        |
| DB0603N2400ANTR         | 2300 | 2500    | 50                     | 12               | 17   | 15             | 23   | 0.25                | 0.35 | 0.30                         | 0.80 | 2   | 3   | 10                        |
| DB0603N2600ANTR         | 2400 | 2800    | 50                     | 12               | 17   | 15             | 23   | 0.25                | 0.35 | 0.30                         | 0.80 | 2   | 3   | 10                        |
| DB0603N3000ANTR         | 2850 | 3150    | 50                     | 12               | 15   | 15             | 26   | 0.20                | 0.30 | 0.30                         | 0.80 | 2   | 3   | 10                        |
| DB0603N3500ANTR         | 3300 | 3700    | 50                     | 12               | 15   | 15             | 26   | 0.20                | 0.30 | 0.30                         | 0.80 | 2   | 3   | 10                        |
| DB0603N4600ANTR         | 4200 | 5000    | 50                     | 12               | 16   | 12             | 15   | 0.50                | 0.70 | 0.40                         | 1.00 | 1.5                                       | 3   | 10                        |
| DB0603N5500ANTR         | 5100 | 5900    | 50                     | 12               | 16   | 10             | 14   | 0.60                | 0.80 | 0.80                         | 1.50 | 1   | 3   | 10                        |
| DB0603N5800ANTR         | 5600 | 6000    | 50                     | 12               | 16   | 12             | 17   | 0.40                | 0.90 | 0.30                         | 0.90 | 2   | 3   | 10                        |

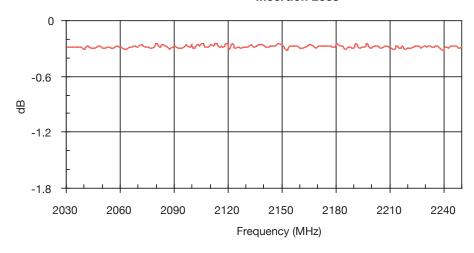
NOTE: Additional Frequencies Available Upon Request

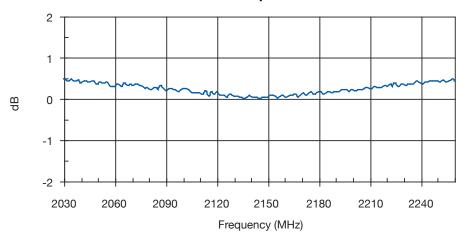


### 2040MHZ TO 2240MHZ DB0603N2140ANTR



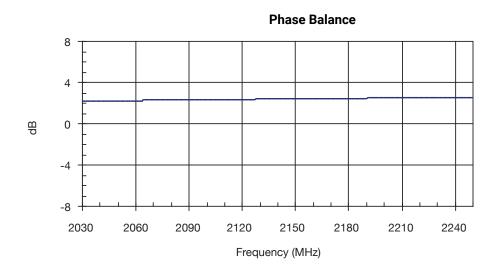
### **Insertion Loss**







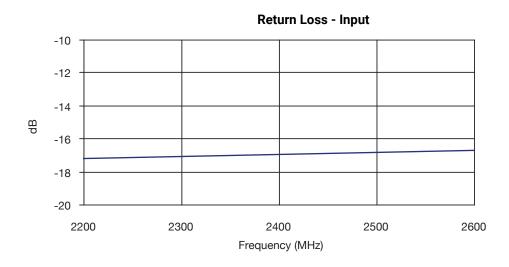
### 2040MHZ TO 2240MHZ DB0603N2140ANTR



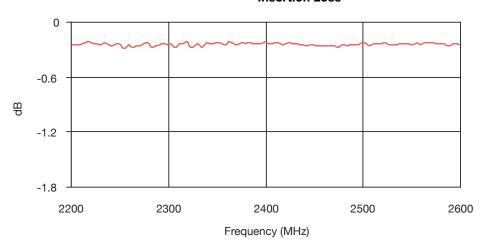
### Isolation -16 -18 -20 -22 -24 -26 2030 2060 2090 2120 2150 2180 2210 2240 Frequency (MHz)

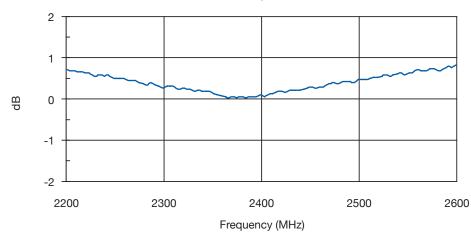


### 2200MHZ TO 2600MHZ DB0603N2400ANTR



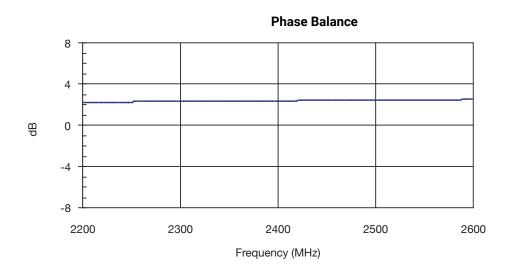
### **Insertion Loss**



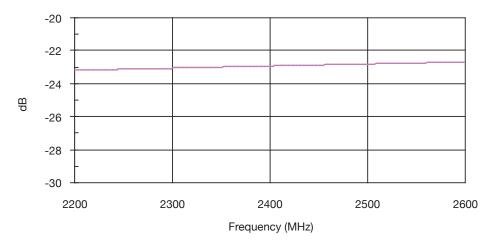




### 2200MHZ TO 2600MHZ DB0603N2400ANTR

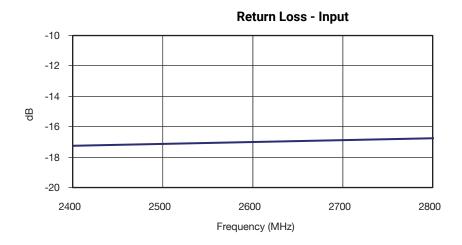


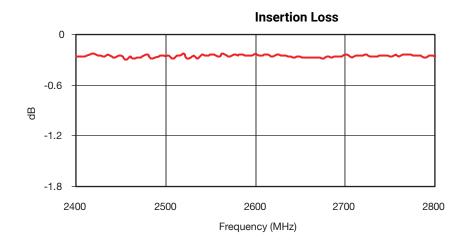
### Isolation

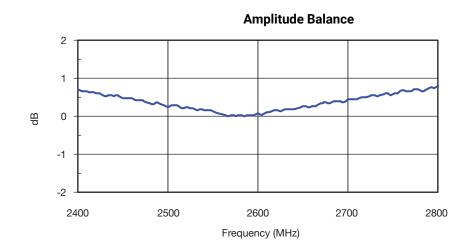




### 2400MHZ TO 2800MHZ DB0603N2600ANTR

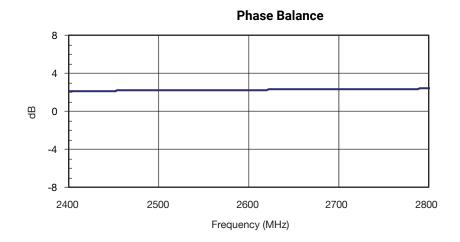


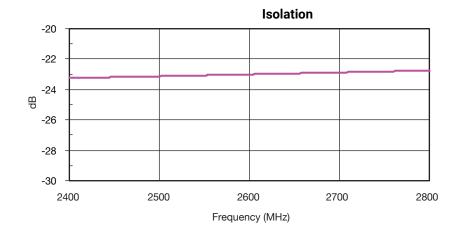






### 2400MHZ TO 2800MHZ DB0603N2600ANTR

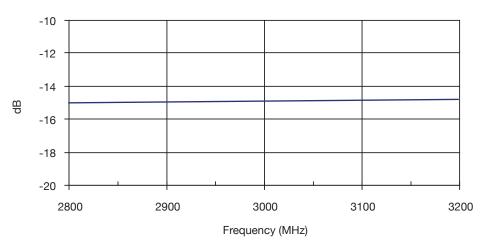




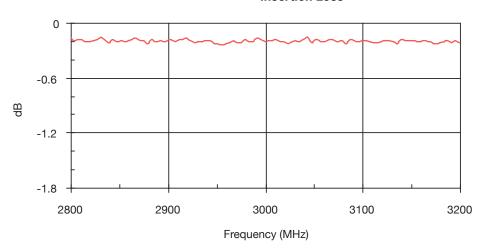


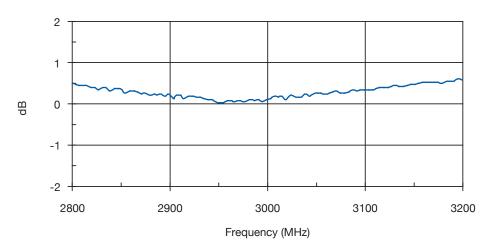
### 2850MHZ TO 3150MHZ DB0603N3000ANTR





### **Insertion Loss**

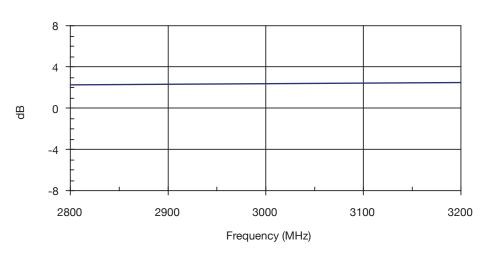




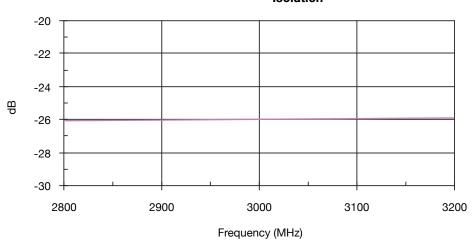


### 2850MHZ TO 3150MHZ DB0603N3000ANTR



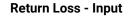


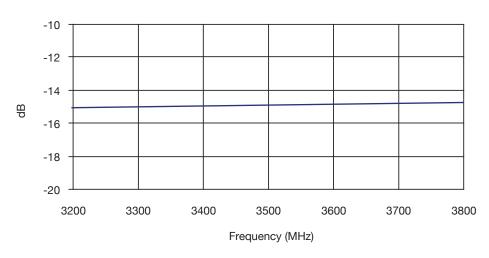
### Isolation



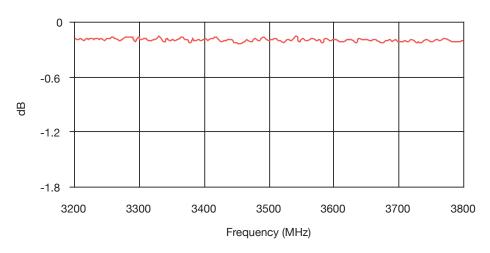


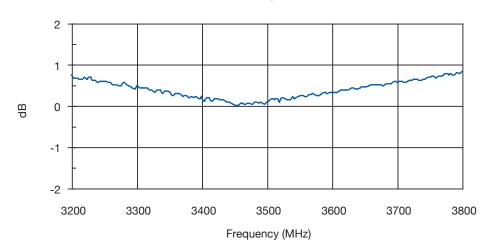
### 3200MHZ TO 3800MHZ DB0603N3500ANTR





### **Insertion Loss**

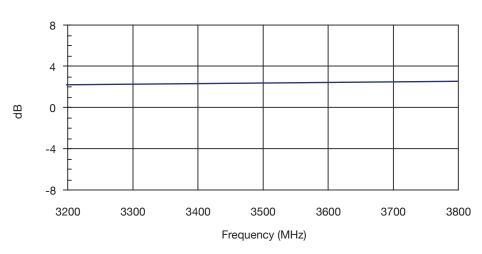




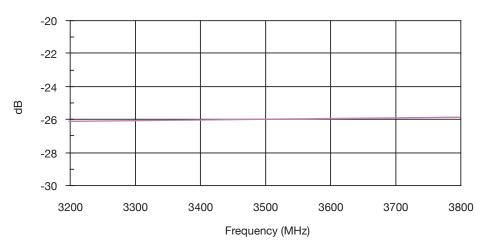


### 3200MHZ TO 3800MHZ DB0603N3500ANTR



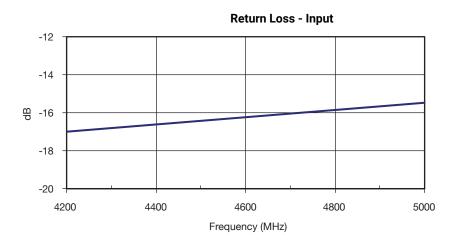


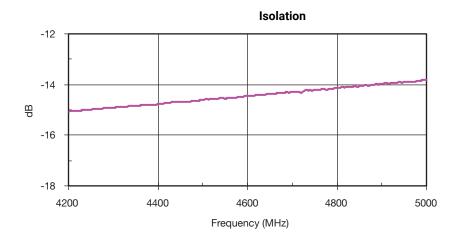
### Isolation

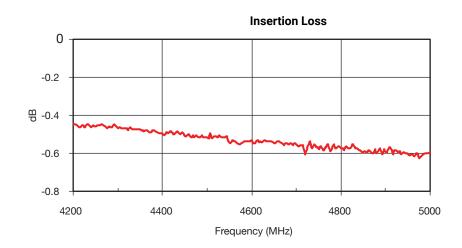




### 4200MHZ TO 5000MHZ DB0603N4600ANTR

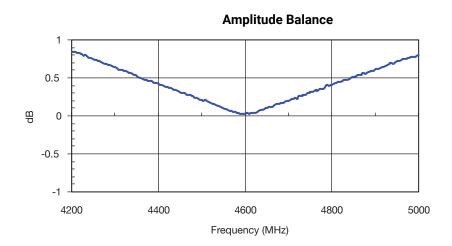


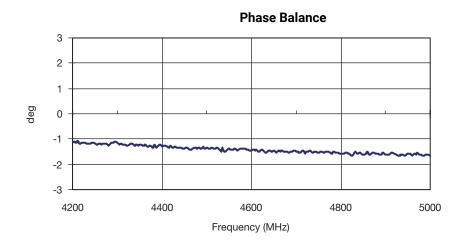






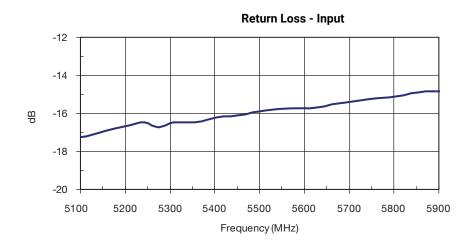
### 4200MHZ TO 5000MHZ DB0603N4600ANTR

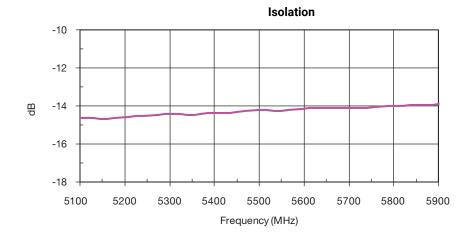






### 5100MHZ TO 5900MHZ DB0603N5500ANTR

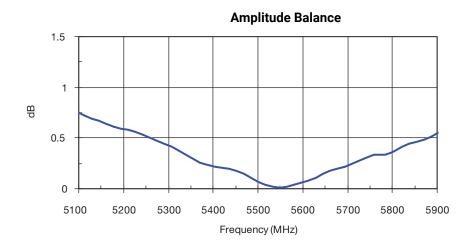


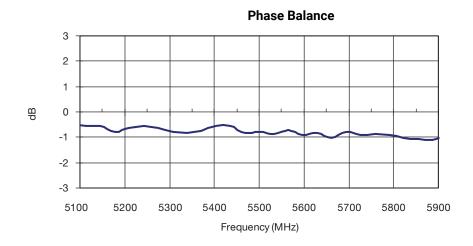






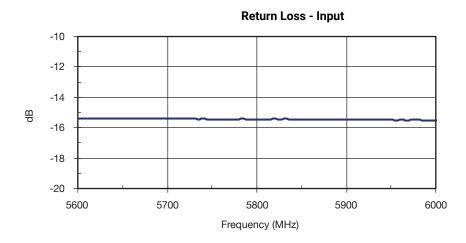
### 5100MHZ TO 5900MHZ DB0603N5500ANTR

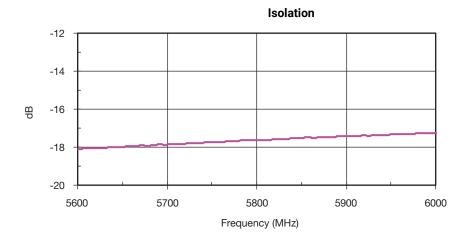


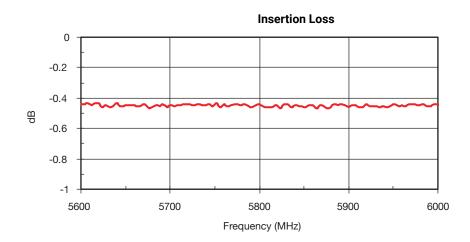




### 5600MHZ TO 6000MHZ DB0603N5800ANTR

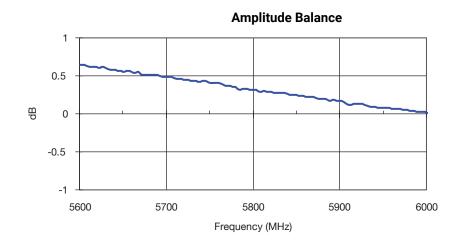








### 5600MHZ TO 6000MHZ DB0603N5800ANTR



# Phase Balance 3 2 1 1 -2 -3 5600 5700 5800 5900 6000 Frequency (MHz)

### 单击下面可查看定价,库存,交付和生命周期等信息

### >>AVX