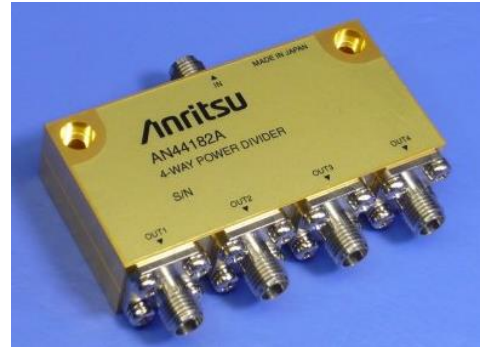


# AN44182A

## 4-WAY POWER DIVIDER

### Features

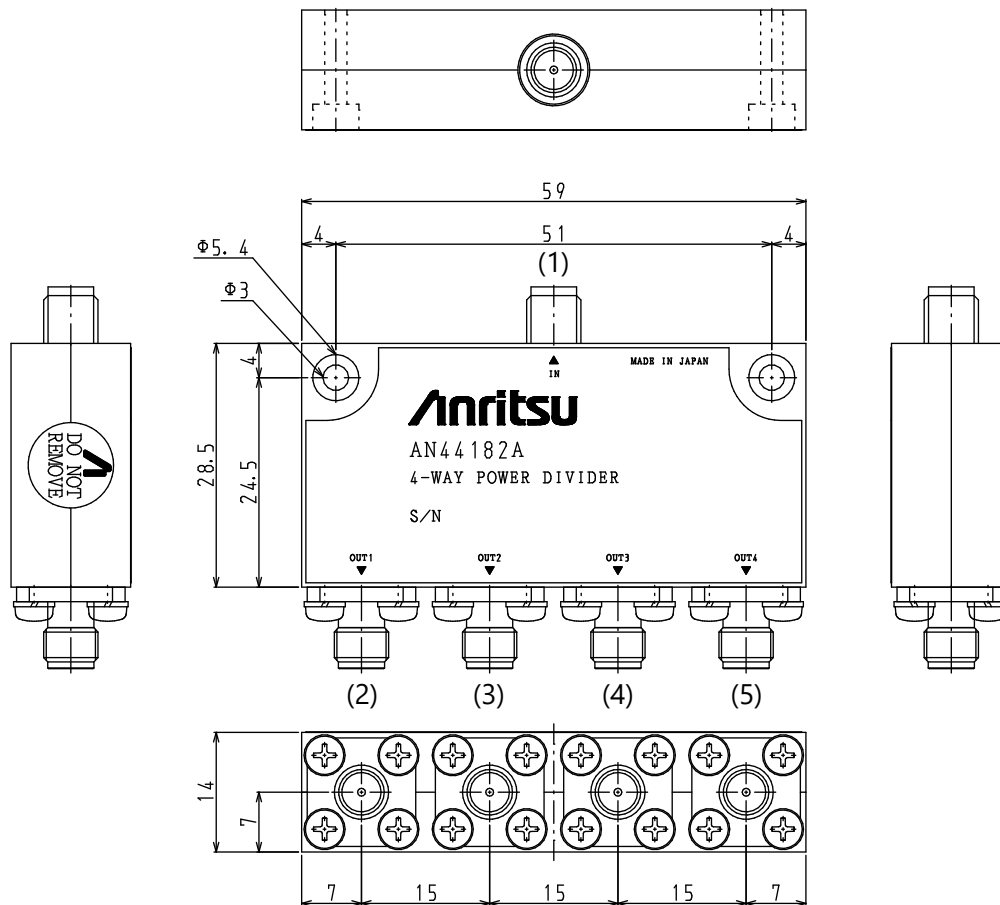
- Output Port: 4-outputs
- Wideband: DC to 40 GHz
- Insertion Loss: 12 dB typ.
- Skew between channels: <3 ps
- I/O Interface: K-connector
- Small Package: 28.5 mm x 59 mm x 14 mm



### Application

- Multi-channel system and ratio measurement where signals are accurately divided or combined

### Dimensions (Unit: mm)



## Pin assign

| No. | Symbols | Functions       | Remarks            |
|-----|---------|-----------------|--------------------|
| 1   | IN      | Signal input    | K-Female connector |
| 2   | OUT1    | Signal output 1 | K-Female connector |
| 3   | OUT2    | Signal output 2 | K-Female connector |
| 4   | OUT3    | Signal output 3 | K-Female connector |
| 5   | OUT4    | Signal output 4 | K-Female connector |

## Absolute Maximum Ratings

| Items                 | Ratings |      | Units |
|-----------------------|---------|------|-------|
|                       | min.    | max. |       |
| Input Power           | -       | +30  | dBm   |
| Operating Temperature | 0       | +70  | °C    |
| Storage Temperature   | -40     | +85  | °C    |

## Specifications

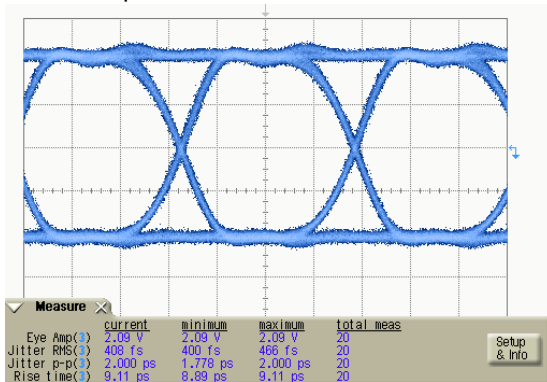
T<sub>a</sub>=25°C, Z<sub>in</sub>=50 Ω, Z<sub>out</sub>=50 Ω

| Items              | Conditions         | Specifications |       |      | Unit |
|--------------------|--------------------|----------------|-------|------|------|
|                    |                    | min.           | typ.  | max. |      |
| Frequency Range    | -                  | DC             | -     | 40   | GHz  |
| Insertion Loss     | @DC                | -              | 12    | 14   | dB   |
|                    | @40 GHz            | -              | 13    | 15   |      |
| Input Return Loss  | DC to 20 GHz       | 15             | 20    | -    | dB   |
|                    | 20 GHz to 40 GHz   | 10             | 15    | -    |      |
| Output Return Loss | DC to 40 GHz       | 7              | 10    | -    | dB   |
| Group Delay        | DC to 40 GHz       | -              | +/-50 | -    | ps   |
| Isolation          | Out1(3) to Out2(4) | -              | 12    | -    | dB   |
|                    | Others             | -              | 18    | -    |      |
| Skew               | -                  | -              | 3     | -    | ps   |

## Characteristics

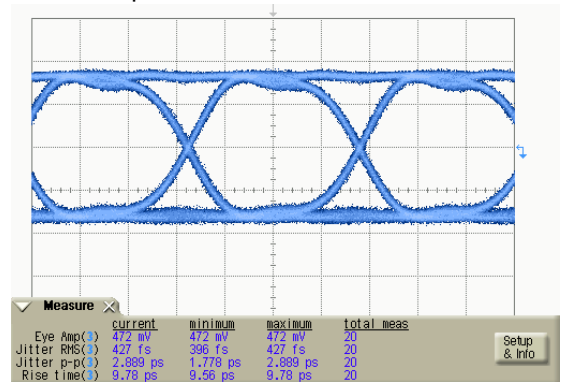
Pulse Response characteristics

Input Waveform @28 Gbit/s



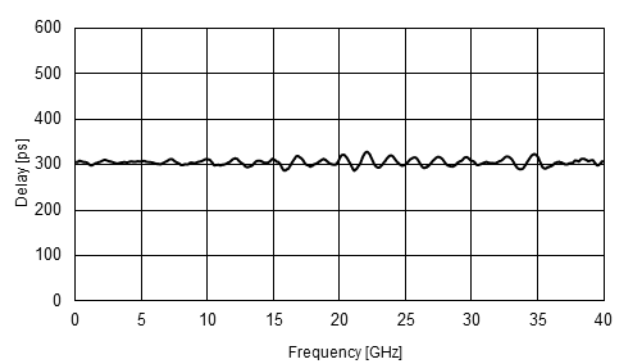
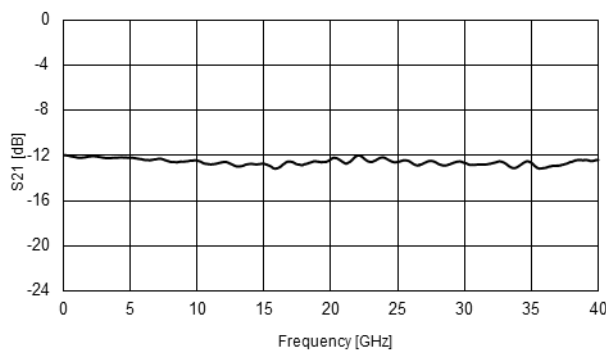
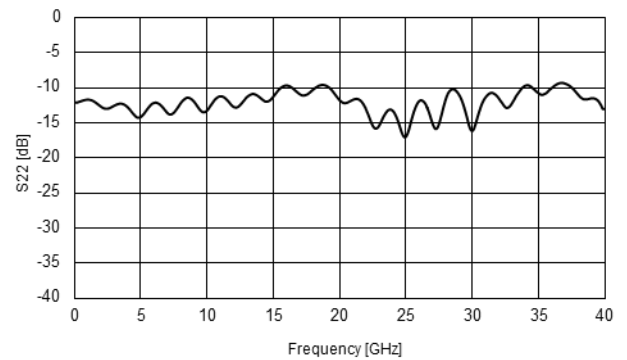
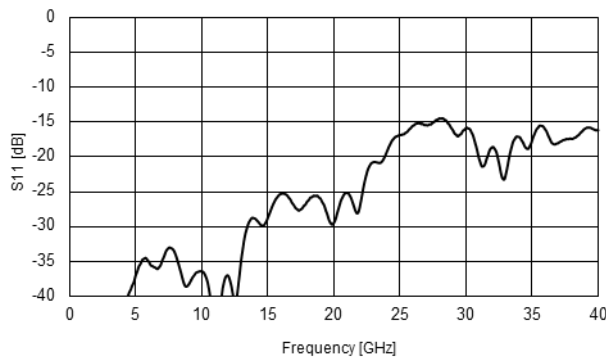
V: 0.50 V/div H: 10 ps/div

Output Waveform @28 Gbit/s



V: 0.15 V/div H: 10 ps/div

## S-Parameter





**ANRITSU CORPORATION  
SENSING & DEVICES COMPANY  
OVERSEAS SALES DEPT**

Tel +81 46 296 6783 fax +81 46 225 8390  
5-1-1 Onna, Atsugi-shi, Kanagawa  
243-8555 Japan

URL: <https://www.anritsu.com/sensing-devices>

This product and its manuals may require an Export License / Approval by the Government of the product's country of origin for re-export from your country. Before re-exporting the product or manuals, please contact us to confirm whether they are export-controlled items or not. When you dispose of export-controlled items, the products / manuals need to be broken / shredded so as not to be unlawfully used for military purpose.

Please contact following local office for the quotation and order.  
Anritsu Corporation reserves the right to change the content of the catalog at any time without notice.

