

## ***BALUN TRANSFORMER / ARI Series***

### ● Features

- 1.Surface mount
2. Impedance ratio:1:2
3. Centre tap on secondary
4. RoHS compliant
- 5.Available on tape and reel.

### ● Applications

Ideally suitable for DOCSIS applications.



### ● Shape & Dimensions

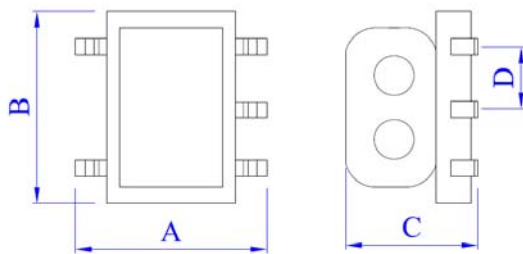


Fig.1

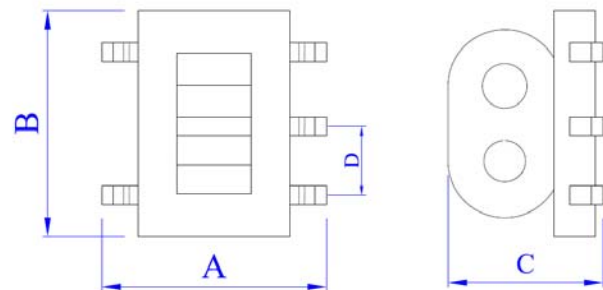
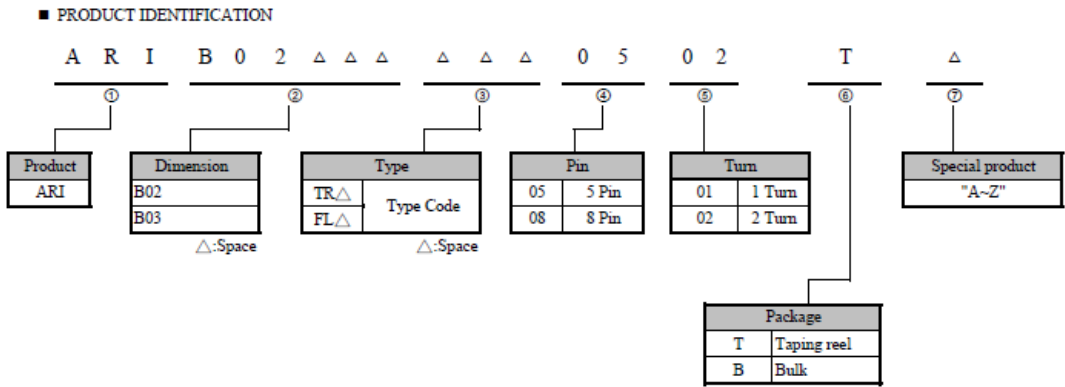


Fig.2

| TYPE                           | Figure | A (mm)          | B (mm)          | C (mm)          | D (mm)         |
|--------------------------------|--------|-----------------|-----------------|-----------------|----------------|
| ARIB02FL0503T<br>ARIB02FL0506C | 1      | $5.39 \pm 0.25$ | $4.22 \pm 0.25$ | $3.70 \pm 0.25$ | $1.5 \pm 0.25$ |
| ARIB02FL0506TA                 | 1      | $5.30 \pm 0.25$ | $4.21 \pm 0.25$ | $3.53 \pm 0.25$ | $1.5 \pm 0.25$ |
| ARIB02FL0506TB                 | 1      | $5.39 \pm 0.25$ | $4.22 \pm 0.25$ | $3.63 \pm 0.25$ | $1.5 \pm 0.25$ |
| ARIB03FL0506T                  | 2      | $6.30 \pm 0.25$ | $6.00 \pm 0.25$ | $4.40 \pm 0.25$ | $2.0 \pm 0.25$ |



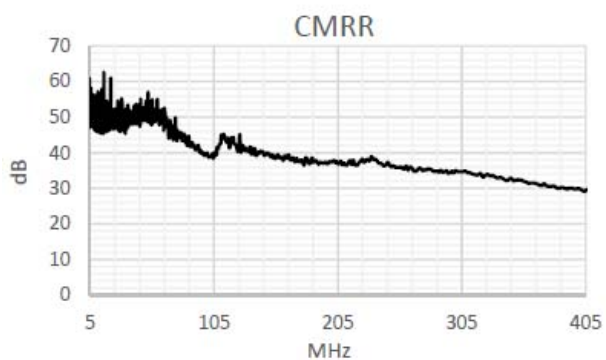
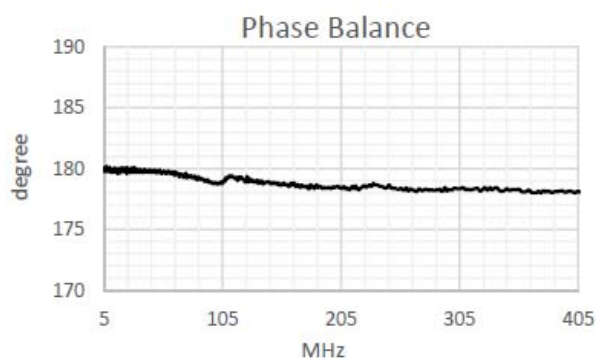
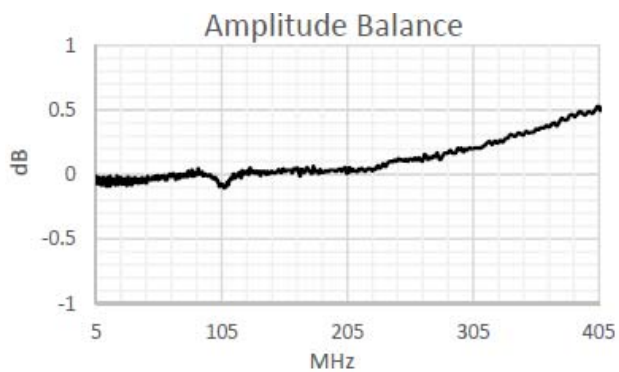
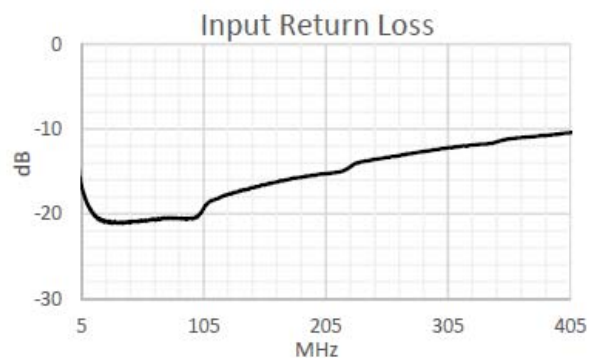
## ◆ ARIB02FL0503T :

| Parameters                           | frequency band | Min. | Typ.                   | Max. | Unit |
|--------------------------------------|----------------|------|------------------------|------|------|
| Port Impedance,<br>Z0 (P1 / P2 / P3) |                |      | 75 / 16.667/<br>16.667 |      | ohm  |
| Insertion Loss                       | 5-204MHZ       |      | 1.4                    | 2.0  | dB   |
| Return Loss                          | 5-204MHZ       | 12.0 | 15.0                   |      | dB   |
| CMRR                                 | 5-204MHZ       | 30.0 | 38.0                   |      |      |
| Amplitude Balance                    | 5-204MHZ       |      | 0.6                    | ±1.0 | dB   |
| Phase Balance<br>(ref value 180°)    | 5-204MHZ       |      | 2.0                    | ±5.0 | Deg  |

### NOTE :

\* The operating temperature range is -40°C to +85°C

### TEST CURVE



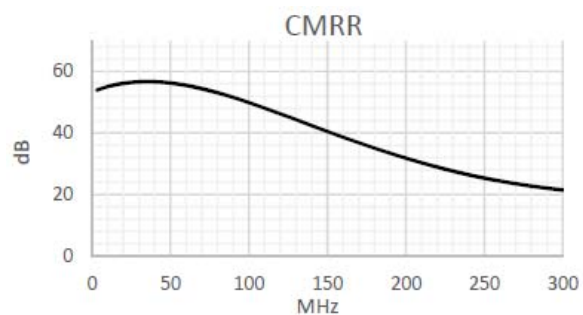
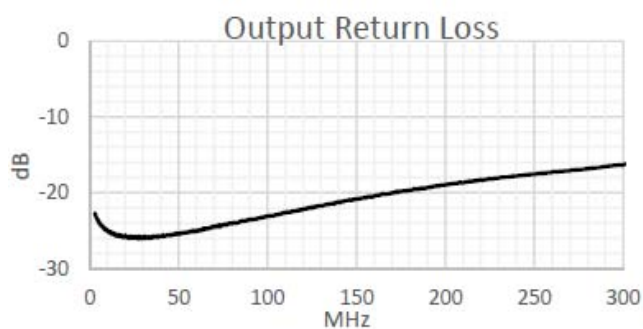
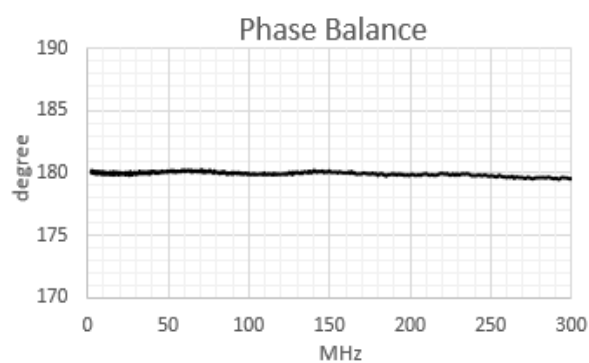
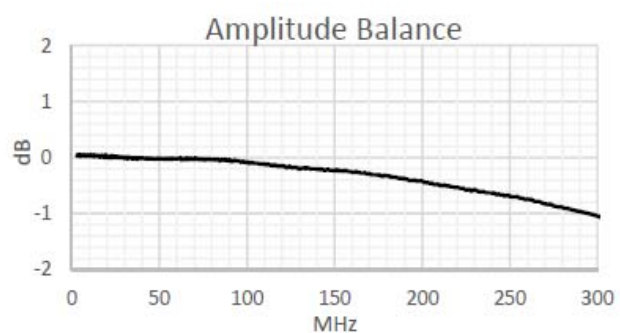
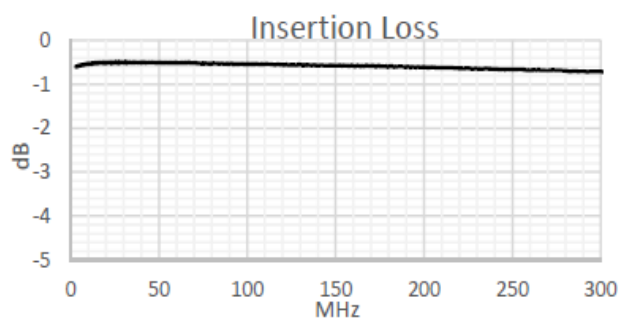
## ◆ ARIB02FL0506TC :

| Parameters                           | frequency band | Min. | Typ.               | Max. | Unit |
|--------------------------------------|----------------|------|--------------------|------|------|
| Port Impedance,<br>Z0 (P1 / P2 / P3) |                |      | 75 / 37.5/<br>37.5 |      | Ohm  |
| Insertion Loss                       | 3-300MHZ       |      | 0.8                | 3.0  | dB   |
| Input Return Loss                    | 3-300MHZ       | 9.0  | 16.0               |      | dB   |
| CMRR                                 | 3-300MHZ       | 15.0 | 22.0               |      | dB   |
| Amplitude Balance                    | 5-50MHZ        |      | 1.2                | ±1.7 | dB   |
| Phase Balance<br>(ref value 180°)    | 5-50MHZ        |      | 1.0                | ±5.0 | °    |

### NOTE :

\* The operating temperature range is -40°C to +85°C

### TEST CURVE



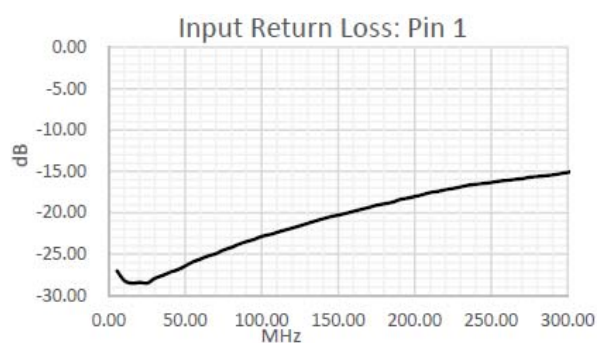
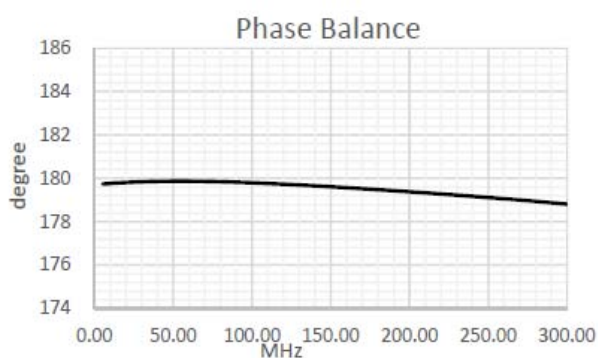
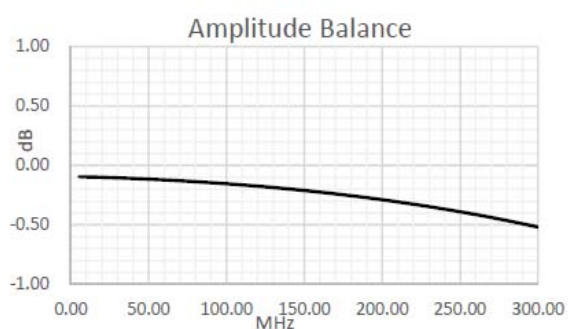
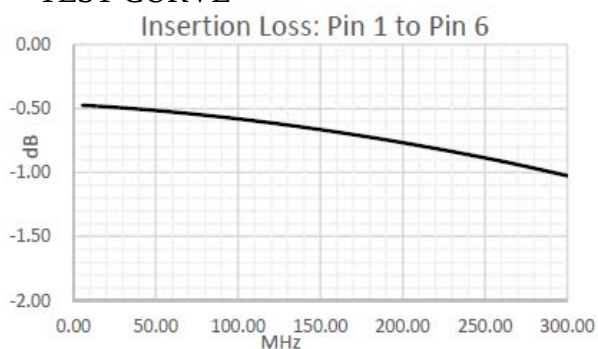
## ◆ ARIB02FL0506TA

| Parameters                           | frequency band | Min. | Typ.               | Max. | Unit |
|--------------------------------------|----------------|------|--------------------|------|------|
| Port Impedance,<br>Z0 (P1 / P2 / P3) |                |      | 75 / 37.5/<br>37.5 |      | Ohm  |
| Insertion Loss                       | 5-60MHZ        |      | 0.4                | 0.6  | dB   |
|                                      | 60-150MHZ      |      | 0.5                | 0.7  | dB   |
|                                      | 150-300MHZ     |      | 1.0                | 1.5  | dB   |
| Input Return Loss<br>(Pin 1)         | 5-60MHZ        | 20.0 | 28.0               |      | dB   |
|                                      | 60-300MHZ      | 10.0 | 15.0               |      | dB   |
| Amplitude Balance                    | 5-60MHZ        |      | 0.02               | 0.2  | dB   |
|                                      | 60-300MHZ      |      | 0.50               | 1.0  | dB   |
| Phase Balance<br>(ref value 180°)    | 5-60MHZ        |      | 0.1                | 2.0  | Deg  |
|                                      | 60-300MHZ      |      | 1.5                | 5.0  | Deg  |

### NOTE :

\* The operating temperature range is -40°C to +85°C

### TEST CURVE



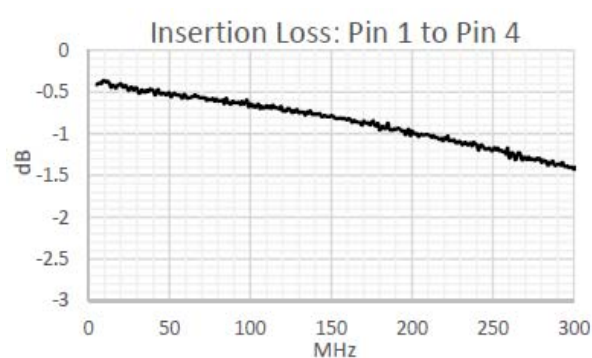
## ◆ ARIB02FL0506TB

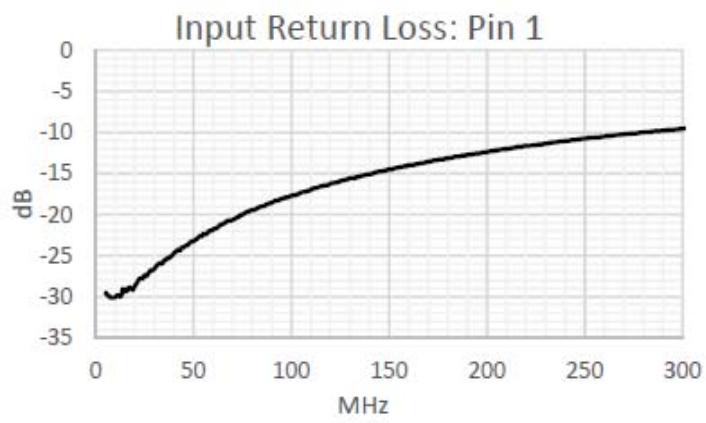
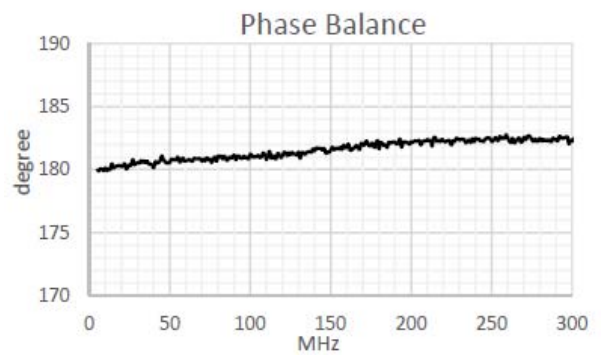
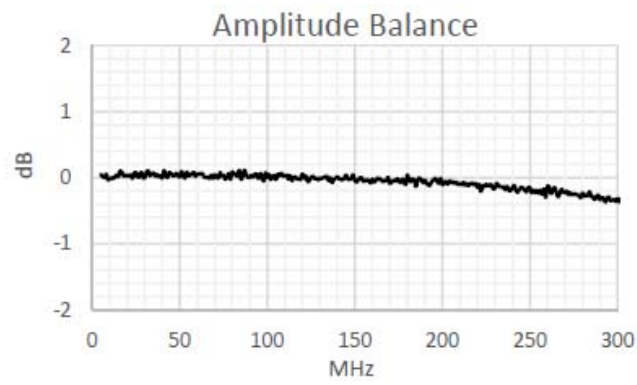
| Parameters                           | frequency band | Min. | Typ.                 | Max. | Unit |
|--------------------------------------|----------------|------|----------------------|------|------|
| Port Impedance,<br>Z0 (P1 / P2 / P3) |                |      | 75 / 18.75/<br>18.75 |      | Ohm  |
| Insertion Loss                       | 5-50MHZ        |      | 0.4                  | 0.6  | dB   |
|                                      | 50-85MHZ       |      | 0.5                  | 0.7  | dB   |
|                                      | 85-205MHZ      |      | 0.8                  | 1.5  | dB   |
|                                      | 205-300MHZ     |      | 1.3                  | 2.2  | dB   |
| Input Return Loss<br>(Pin 1)         | 5-50MHZ        | 20.0 | 25.0                 |      | dB   |
|                                      | 50-85MHZ       | 15.0 | 19.0                 |      | dB   |
|                                      | 85-205MHZ      | 8.0  | 13.0                 |      | dB   |
|                                      | 205-300MHZ     | 6.0  | 9.0                  |      | dB   |
| Amplitude Balance                    | 5-50MHZ        |      | 0.02                 | 0.2  | dB   |
|                                      | 50-85MHZ       |      | 0.04                 | 0.3  | dB   |
|                                      | 85-205MHZ      |      | 0.04                 | 0.5  | dB   |
|                                      | 205-300MHZ     |      | 0.1                  | 0.7  | dB   |
| Phase Balance<br>(ref value 180°)    | 5-50MHZ        |      | 0.1                  | 2.0  | Deg  |
|                                      | 50-85MHZ       |      | 0.3                  | 3.0  | Deg  |
|                                      | 85-205MHZ      |      | 1.1                  | 6.0  | Deg  |
|                                      | 205-300MHZ     |      | 1.2                  | 7.0  | Deg  |

### NOTE :

\* The operating temperature range is -40°C to +85°C

### TEST CURVE





## ◆ ARIB03FL0506T :

| Parameters                           | frequency band | Min. | Typ.                   | Max. | Unit |
|--------------------------------------|----------------|------|------------------------|------|------|
| Port Impedance,<br>Z0 (P1 / P2 / P3) |                |      | 75 / 16.667/<br>16.667 |      | Ohm  |
| Insertion Loss                       | 5-100MHZ       |      | 1.2                    | 2.0  | dB   |
| Return Loss                          | 5-100MHZ       | 7.0  | 9.0                    |      | dB   |
| Amplitude Balance                    | 5-100MHZ       |      | 0.2                    | 0.7  | dB   |
| Phase Balance<br>(ref value 180°)    | 5-100MHZ       |      | 2.6                    | 8    | Deg  |
| CMRR                                 | 5-100MHZ       | 20   | 32                     |      | dB   |

### NOTE :

\* The operating temperature range is -40°C to +85°C

### TEST CURVE

