



# Power Splitter

## PS Series

### Features

- Resistive type power splitter. Wide frequency range : DC to 20GHz.
- Wide band provides less distortion of square pulses of digital signals
- Small and easy to mount
- Special design and thin film produce less reflection.

### Applications

- Communication devices
- Wide band measuring instrumentation



## Part numbering system

**PS 1608 G T2 - R50 - T1**

Series code: PS 1608 G T2 - R50 - T1

Size : PS1608, PS2012, PS3216, PS5025

G : General

Packing quantity: T=Tape (T1/T5), B=Bulk

Impedance : 50Ω

Number of Output terminals

**PS 1005 T2 - R50 - FD - T1**

Series code: PS 1005 T2 - R50 - FD - T1

Size : PS1005

No GND, Need Face down mounting

Packing quantity: T=Tape (T1/T5), B=Bulk

Impedance : 50Ω

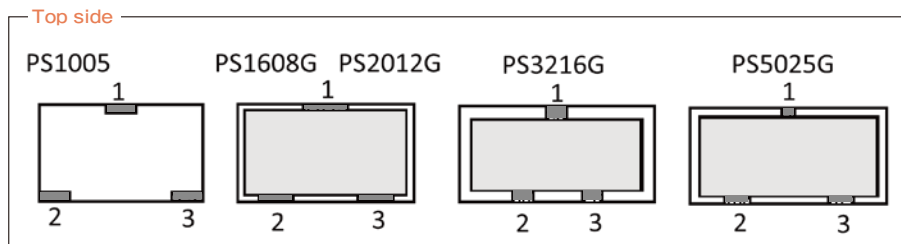
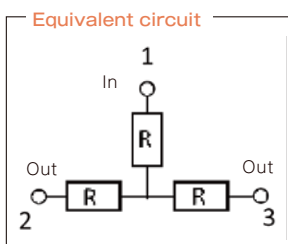
Number of Output terminals

## Electrical Specification

| Type                   | PS1005 *1         | PS1608G  | PS2012G      | PS3216G    | PS5025G    |
|------------------------|-------------------|--|--------------|------------|------------|
| Operating frequency    | DC - 20GHz        | DC - 20GHz   | DC - 17.5GHz | DC - 15GHz | DC - 10GHz |
| Rated power            | 100mW             | 100mW  | 125mW        | 250mW      | 500mW      |
| Insertion Loss         | 6dB±0.5dB < 10GHz |  |              |            | < 7.5GHz   |
|                        | 6dB±1.0dB < 20GHz |  |              |            | < 10GHz    |
| Distribution Deviation |                   | < 0.3dB (Max frequency)                                |              |            |            |
| VSWR                   | ≤1.3 < 10GHz      |  |              |            | < 7.5GHz   |
|                        | ≤1.5 < 20GHz      |  |              |            | < 10GHz    |
| Operating temperature  |                   | -40°C ~ +125°C   |              |            |            |
| Packaging quantity     |                   | 50pcs/bag(B)<br>1,000pcs/reel(T1)<br>5,000pcs/reel(T5) |              |            |            |

\*1 The PS1005 series has no ground plane.

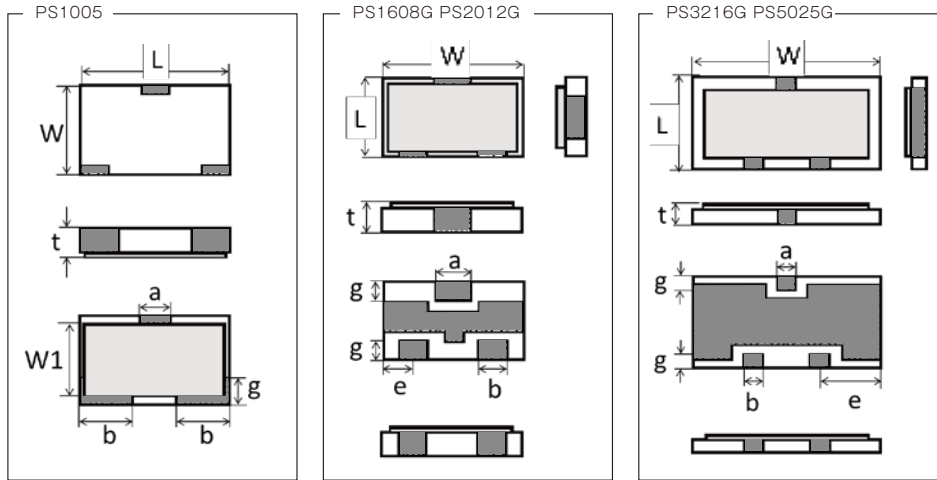
## Equivalent Circuit and pin arrangement



High frequency surface mount components

PS series

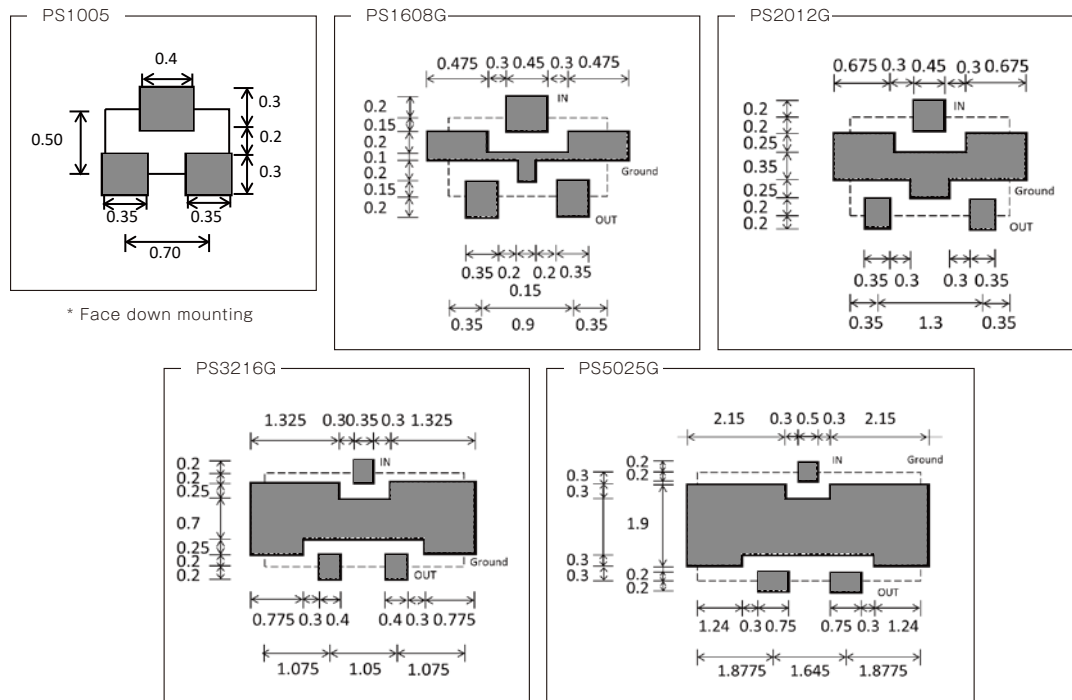
### ◆ Dimensions



| Type    | Size (inch) | W         | L         | t         | a         | b         | e          | g         |
|---------|-------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| PS1005  | 0402        | 1.00±0.10 | 0.50±0.10 | 0.30±0.10 | 0.40±0.10 | 0.35±0.10 | —          | 0.20±0.10 |
| PS1608G | 0603        | 1.60±0.10 | 0.80±0.10 | 0.40±0.10 | 0.45±0.10 | 0.35±0.10 | 0.40±0.10  | 0.25±0.10 |
| PS2012G | 0805        | 2.00±0.10 | 1.25±0.10 | 0.40±0.10 | 0.45±0.15 | 0.35±0.15 | 0.35±0.10  | 0.25±0.10 |
| PS3216G | 1206        | 3.20±0.10 | 1.60±0.10 | 0.40±0.10 | 0.35±0.10 | 0.40±0.15 | 1.075±0.10 | 0.20±0.10 |
| PS5025G | 2010        | 5.00±0.20 | 2.50±0.20 | 0.80±0.20 | 0.50±0.20 | 0.75±0.20 | 1.65±0.20  | 0.30±0.15 |

(unit : mm)

### ◆ Recommended land patterns (soldering footprints)



\* Face down mounting

### ◆ Derating Curve

