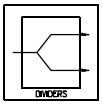
# PDG-02A Series 0° POWER DIVIDERS / COMBINERS

***10 to 1000 MHz / 2-Way / Broadband / Minimal Size and Weight / Low 0.2" Profile / Surface Mount***




## *PRINCIPAL SPECIFICATIONS*

| Model Number | Frequency Range, MHz | Isolation, dB, Min. | Isolation, dB, Typ. | Insertion Loss, dB, Max. | Insertion Loss, dB, Typ. | Amplitude Balance, dB, Max. | Amplitude Balance, dB, Typ. | Phase Balance, Max. | Phase Balance, Typ. | VSWR Max. | VSWR Typ. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PDG-02A-250 | 10 - 500 | 20 | 25 | 1.0 | 0.5 | 0.2 | 0.1 | 2° | 1° | 1.5:1 | 1.3:1 |
| PDG-02A-500 | 50 - 1000 | 18 | 25 | 1.5 | 1.0 | 0.3 | 0.2 | 4° | 2° | 1.5:1 | 1.3:1 |

**General Notes:**

1. The basic power divider is a hybrid junction with one of its ports internally terminated. For in-phase power division, such as provided in the PDG-02A series, the E port is internally terminated.

2. Careful design and construction insure phase and amplitude uniformity between units. Additionally, these units provide excellent transfer phase linearity and amplitude flatness. These characteristics are of critical importance to the successful design of modern multi-channel receivers, transmitters and antenna systems.

3. Merrimac Power Dividers/Combiners are available in a variety of packages to suit most requirements. The surface mounted versions in the PDG-02A series use lumped element design. This approach is particularly appropriate for those applications where small size is important.

## *GENERAL SPECIFICATIONS*

Impedance: 50 Ω nom.

Coupling (Theoretical): – 3.0 dB

CW Input Power: 250 mW max.
(When used as divider with 1.2:1 $VSWR_{out}$)

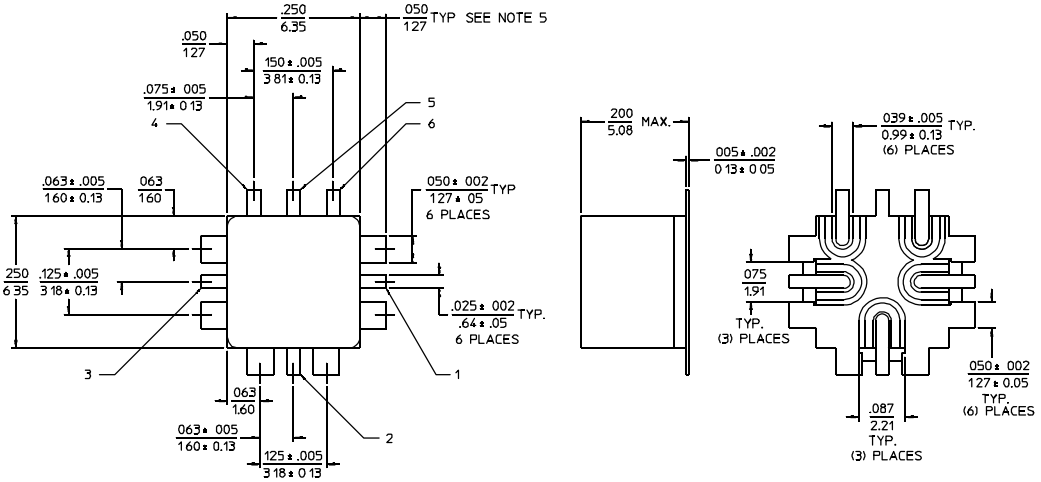
Internal Load Dissipation: 28 mW max.

Weight, nominal: 0.02 oz. (0.5 g)

Operating Temperature: – 55° to + 85°C

## Surface Mount A-Package Outline

NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. All unmarked tabs are ground.




| PIN NO. | FUNCTION |
|---|---|
| 1 | OUTPUT |
| 2 | INPUT |
| 3 | OUTPUT |
| 4 | GROUND |
| 5 | GROUND |
| 6 | GROUND |

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