

## QDPS-200-2000-360-6

### 0.2~2GHz, 360°, 6Bits

#### Features:

- \* Broadband
- \* High Reliable

#### Applications:

- \* Laboratory Test
- \* Instrumentation



#### Electrical

|                      |             |
|----------------------|-------------|
| Frequency:           | 0.2~2GHz    |
| VSWR:                | 1.8 typ.    |
| Insertion Loss:      | 18dB typ.   |
| Normalized Loss:     | ±1.5 typ.   |
| Phase Range:         | 360°        |
| Phase Accuracy:      | ±4° typ.    |
| Control Bits:        | 6 Bits      |
| Step:                | 5.625° typ. |
| Voltage/Current:     | -5V/0.01A   |
| Impedance:           | 50Ω         |
| TTL Control Voltage: | 0: 0V       |
|                      | 1: +5V      |

#### Absolute Maximum Ratings<sup>\*1</sup>

|                  |            |
|------------------|------------|
| RF Input Power:  | +25dBm     |
| Control Voltage: | -0.5~+5.5V |

[1] Permanent damage may occur if any of these limits are exceeded.

#### Mechanical

|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| Size <sup>*2</sup> :                         | 26*26*12mm<br>1.024*1.024*0.472in |
| RF Connectors:                               | SMA Female (Removable)            |
| Power Supply & Control Interface Connectors: | J30J-9ZKP                         |
| Mounting:                                    | 4-Φ2.8mm through-hole             |

[2] Exclude connectors.

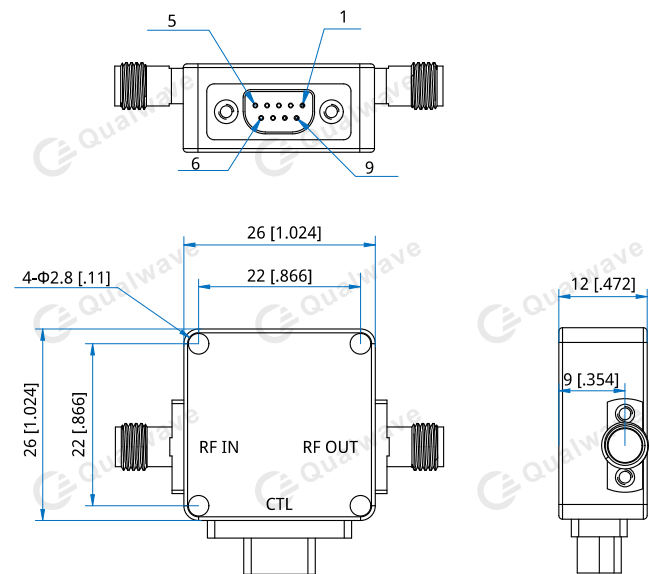
#### Environmental

|                            |            |
|----------------------------|------------|
| Operating Temperature:     | -45~+85°C  |
| Non-operating Temperature: | -55~+125°C |

#### Control True Table

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 | Pin 6 | Pin 7 | Pin 8 | Pin 9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| E1    | E2    | E3    | E4    | E5    | E6    | NC    | VEE   | GND   |

#### Outline Drawings



Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

#### Logic Table

| E1 | E2 | E3 | E4 | E5 | E6 | VEE | Phase Shift |
|----|----|----|----|----|----|-----|-------------|
| 0  | 0  | 0  | 0  | 0  | 0  | -5V | 0           |
| 1  | 0  | 0  | 0  | 0  | 0  |     | -5.625°     |
| 0  | 1  | 0  | 0  | 0  | 0  |     | -11.25°     |
| 0  | 0  | 1  | 0  | 0  | 0  |     | -22.5°      |
| 0  | 0  | 0  | 1  | 0  | 0  |     | -45°        |
| 0  | 0  | 0  | 0  | 1  | 0  |     | -90°        |
| 0  | 0  | 0  | 0  | 0  | 1  |     | -180°       |
| 1  | 1  | 1  | 1  | 1  | 1  |     | -354.375°   |

#### How To Order

**QDPS-200-2000-360-6**

Customization is available upon request.

## Typical Performance Curves

