

## QPS2-1000-6000-R

### SPDT, 1~6GHz, Reflective

#### Features:

- \* Low Insertion Loss
- \* High Isolation

#### Applications:

- \* Wireless
- \* Transmitter
- \* Laboratory Test
- \* Radar

#### Electrical

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| Frequency:                              | 1~6GHz                                   |
| Insertion Loss:                         | 1dB max. @1~4GHz<br>1.2dB max. @4~6GHz   |
| Insertion Loss Temperature Coefficient: | 0.003dB/°C typ.                          |
| Isolation:                              | 60dB min. @1~4GHz<br>55dB min. @4~6GHz   |
| VSWR:                                   | 1.5 max.                                 |
| RF Input Power:                         | 47dBm max. (50.1W)                       |
| DC Power Dissipation:                   | 1.3W typ.                                |
| Output Power (P0.1dB):                  | 47dBm typ.                               |
| IIP3:                                   | 52dBm typ. @1~4GHz<br>51dBm typ. @4~6GHz |
| Voltage:                                | +28V                                     |
| Bias Current:                           | 100mA typ.                               |
| Switching Time:                         | 600ns max.                               |
| Control*1:                              | High - 1 @2.8~5V<br>Low - 0 @0~0.8V      |
| Impedance:                              | 50Ω                                      |

[1] Cold Switching: Before changing any TTL signal(s), the RF input power must be blanked or the switch could be damaged.

#### Mechanical

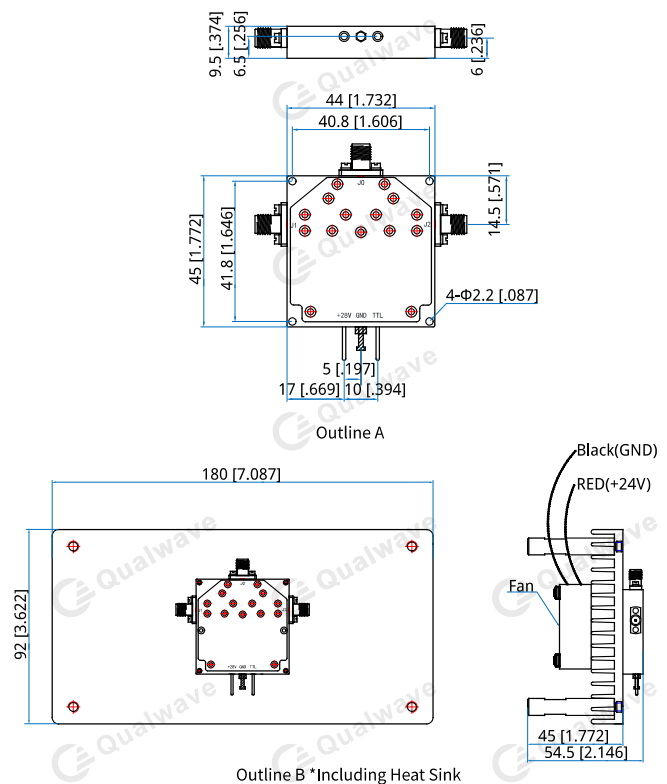
|                          |                                                    |
|--------------------------|----------------------------------------------------|
| RF Connectors:           | SMA female                                         |
| Weight:                  | 127g max. (Net)<br>495g max. (Including heat sink) |
| Power Supply Connectors: | Feed through/Terminal post                         |
| Material:                | Copper                                             |
| Finish:                  | Gold plated                                        |

#### Environmental

|                            |            |
|----------------------------|------------|
| Operating Temperature*2:   | -40~+85°C  |
| Non-operating Temperature: | -50~+105°C |

[2] If the device operates in high power state, recommend keeping case temperature lower than 60°C.

#### Outline Drawings



\* Heatsink Required - Mandatory for High Power Operation.

Unit: mm [in]

Tolerance: ±0.1mm [±0.004in]

#### Control True Table\*3

| Input TTL | Connection |
|-----------|------------|
| 1         | J0 - J1 On |
| 0         | J0 - J2 On |

[3] Control Pin Customization available upon request.

#### How To Order

[QPS2-1000-6000-R](#) - Outline A

[QPS2-1000-6000-R-F](#) - Outline B

Customization is available upon request.