

QPS2-20-500-R

SPDT, 0.02~0.5GHz, 100W, Reflective

Features:

- * Low Insertion Loss
- * High Isolation

Applications:

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

Electrical

Frequency:	0.02~0.5GHz
Insertion Loss:	0.8dB max.
Insertion Loss Temperature Coefficient:	0.003dB/°C typ.
Isolation:	35dB typ.
VSWR:	1.8 max.
RF Input Power:	50dBm max. (100W)
Input Peak Power:	500W max. (1% duty cycle, 1us pulses)
DC Power Dissipation:	0.25W
Output Power (P0.1dB):	50dBm typ.
IIP3:	45dBm typ.
Voltage:	+5V DC
Current:	50mA
Switching Time:	38us typ.
Impedance:	50Ω
Control*1:	High - 1 @2.8~5V Low - 0 @0~0.8V

[1] TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged. Cold Switching: Before changing any TTL signal(s), the RF input power must be blanked or the switch could be damaged.

Absolute Maximum Ratings*2

Biasing: +5V±10%

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

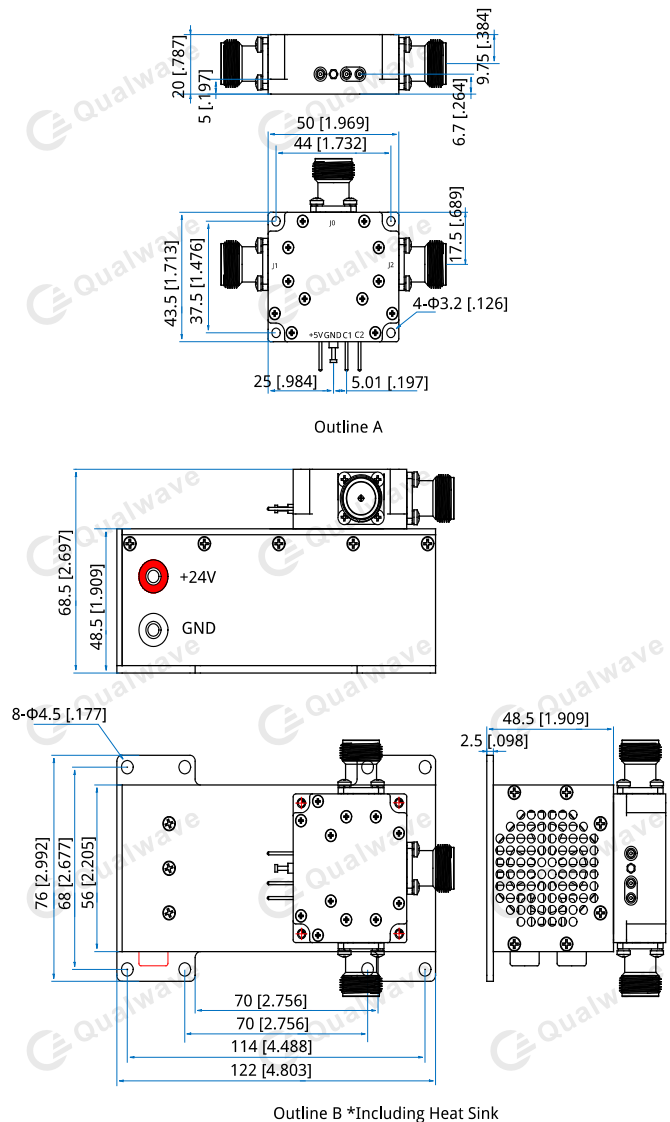
Mechanical

RF Connectors:	N Female
Weight:	284g max. (Net) 709g max. (Including heat sink)
Material:	Copper
Power Supply Connectors:	Feed Through/Terminal Post
Mounting:	4-Φ3.2mm through-hole

Environmental

Operating Temperature:	-40~+85°C (Case Temperature)
Non-operating Temperature:	-50~+105°C

Outline Drawings



*Heatsink Required - Mandatory for High Power Operation.

Unit: mm [in]

Tolerance: ±0.1mm [±0.004in]

Control True Table*³

C1	C2	Connection
0	1	All Off
0	0	J0 - J1 On
1	0	J0 - J2 On
1	1	Not Used

[3] Control Pin Customization available upon request.

How To Order

[QPS2-20-500-R](#) - Outline A

[QPS2-20-500-R-F](#) - Outline B

Customization is available upon request.