

QMODP1Axx

Product Overview

These drivers based on quartz oscillators, produce a fixed stable and accurate RF frequency signal. The built in amplifier delivers the necessary RF power to drive an air cooled or water cooled Q-switch up to 200 W. The RF output power can be externally modulated with a TTL and analog 0-5 V signal. This version of driver is using the latest technology of transistors and decreases significantly heat dissipation.

FEATURES

- Fixed frequency 27.12, 40.68, 68, 80 and 110MHz
- RF power up to 200 Watts
- TTL + Analog controls
- Temperature / VSWR controls
- RoHS



SPECIFICATIONS (T=25°C)

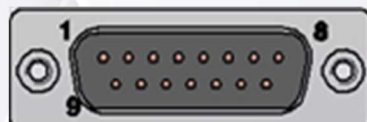
	Units	Specifications
Carrier Frequency	MHz	27.12 / 40.68 / 68 / 80 / 110
Frequency Stability	ppm/°C	Nom +/- 1
Frequency Accuracy	Ppm	< 50
Output RF Power (@1dB compression)	W	a) ≥ 20 b) ≥ 40 c) ≥ 80 d) ≥ 120 e) ≥ 200
Power Supply OEM version	VDC	24 +/- 0.5 up to 80W - 28VDC @120W - 48VDC @200W a) <3.5 A b) <3.5 A c) < 6.5 A Connector MSTB 2 pts 5.08 male ref:0707248
Digital Control (Pin 3)		TTL Reversed / 1 kΩ Pull down (DPC) (0 = RF ON)
Analog Control (Pin 9)		0-5 V / 10 kΩ, 5V= RF HIGH LEVEL Control (FAC)
Rise Time/Fall time (10-90%)	ns	Nom 30 (<50)
Class		AB
Output Impedance	Ω	50
VSWR		< 1.5/1
Extinction Ratio	dB	> 45
Forwarded Power Measurement (Pin 6)		Analog signal / (Load 1 KΩ)
Returned Power Measurement (Pin 8)		Analog signal / (Load 1 KΩ)
Thermal Security Q-Switch		SMC (protection against overheating) (for versions ≥40W)
Thermal Security Driver		Automatic switch off for Tcase>70°C
Thermal Alarm Q-Switch (Pin 5)		TTL Signal
Thermal Alarm Driver (Pin 15)		TTL Signal
Input / Output Connectors		BNC / DB 15 / SMC
Size / Weight		148 x 114 x 27 mm ³ / 635 g
Heat Exchange		Conduction through baseplate for OEM versions
Operating Temperature	°C	10 to 40 (max Tcase 55°C)
Storage Temperature	°C	-40 to +85

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PIN Connections

DB15 connector

- 1- PAC: ANALOG POWER RF OFF LEVEL (0-5V/10 Kohms)
- 2- GND
- 3- DPC: TTL Reversed Input (1Kohms)
- 4- GND
- 5- Alarm / QST thermal security (5V OK, 0V AO too hot)
- 6- Forward Output Power signal
- 7- GND
- 8- Returned Output Power signal
- 9- FAC: Analog Power adjustment (0-5V/10 Kohms)
- 10- GND
- 11- +5VDC output (100mA max, can be wired to FAC)
- 12- GND
- 13- NC
- 14- GND
- 15- Alarm / Driver thermal security (5V OK, 0V T° Driver >70°C)



Power supply connector
MSTB 2 pts 5.08 male ref:0707248

MECHANICAL DRAWINGS (mm)

