

## ORDELA MODEL QS-11

### CHARGE-SENSITIVE PREAMPLIFIER

#### DESCRIPTION

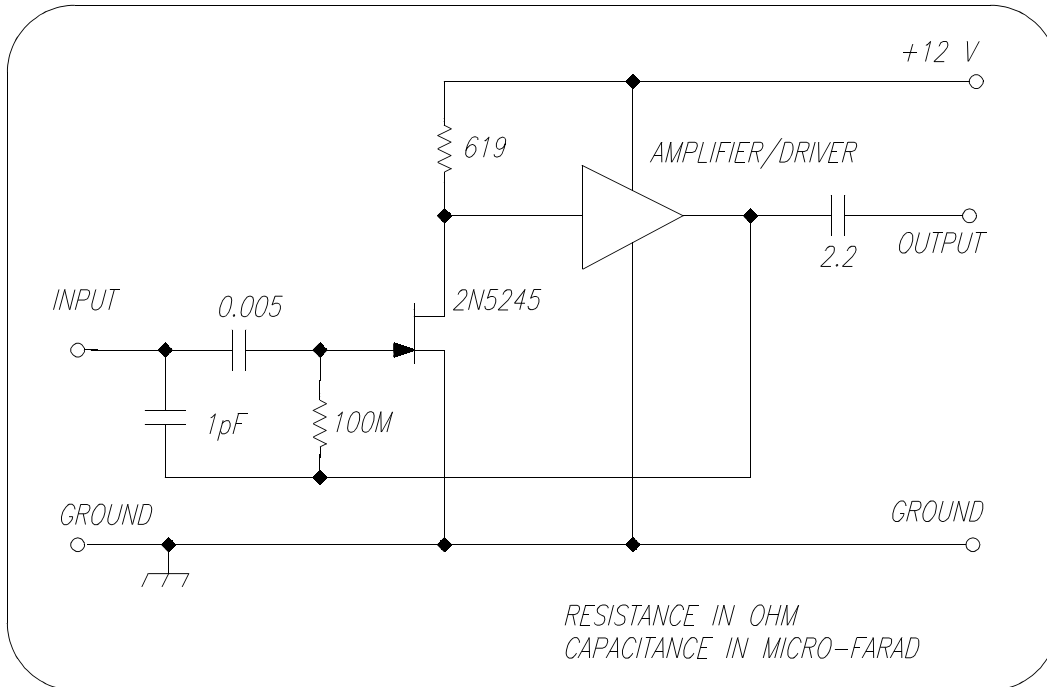
The ORDELA Model QS-11 is a low-noise, charge-sensitive preamplifier designed with optimum transfer characteristics for pulses from proportional counters or similar signal sources. The Model QS-11 has a low power dissipation and operates on a single 12 V supply. The Model QS-11 is specifically designed for operation in vacuum.

The complete preamplifier module is built on a 7.0-cm long, 4.2-cm wide printed circuit board. All interconnections are 6 inch long, pre-wired leads. Conformal coating of the circuit board in accordance with NASA guidelines NHB 5300.4(3J) is available as an option.

#### SPECIFICATIONS

INPUT SIGNALS*:	current pulses, 0 to 1 pC integrated charge
INPUT NOISE VOLTAGE:	1.5 nV (Hz) <sup>-1/2</sup> (@ 100 kHz)
INPUT RESISTANCE:	33 K-ohm
INPUT CAPACITANCE:	6400 pF
GAIN-BANDWIDTH PRODUCT:	500 MHz
OPEN-LOOP GAIN:	3000
CHARGE GAIN*:	1 V/pC
IMPULSE RESPONSE:	20 ns rise-time (Detector capacitance = 500 pF)
OUTPUT DRIVE:	+/-2 V into 1 k-ohm load, +/-6 mA into short circuit
POWER REQUIREMENTS:	12 V @ 6.5 mA
INPUT CONNECTIONS:	Two wire leads, 24 AWG solid, 6" long (input, ground)
OUTPUT CONNECTIONS:	Three wire leads, 24 AWG TFE insulated, 6" long (power, ground, output)
DIMENSIONS:	7.0 cm long, 4.2 cm wide, and 1.3 cm high
SHIPPING WEIGHT:	0.2 kg

\*other values upon request



**ORDELA MODEL QS-11 CIRCUIT AND INTERCONNECTIONS**

**WARRANTY**

ORDELA, Inc. warrants its products to be free from defects in materials and workmanship for 12 months after shipment. No other warranty is included. Specifically, no warranty of merchantability or fitness for a particular purpose is implied. ORDELA's liability under this warranty is limited to repairing or replacing the product at ORDELA's option. This warranty is void if the product is operated improperly, disassembled, or modified other than in the ORDELA laboratory.