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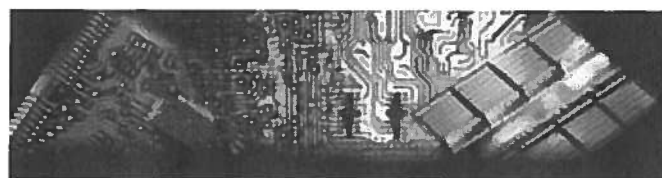
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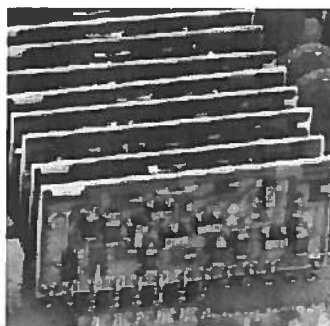
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**Microelectronic
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RAL108



The RAL108 is a hybrid pre-amplifier intended for the read-out of silicon strip detectors in Nuclear Structure Physics applications. The feedback capacitor is 2.2pF, with a 22.7 MOhm feedback resistor (giving 50µs fall-time).

RAL108s are plugged into a motherboard which connects them via 100-Ohm cables to the RAL109 shaping amplifier system. RAL108 type A has been designed for amplifying negative charge, type B for positive charge.

FEATURES

Pre-amp gain	10 mV/MeV (silicon) or 37nV/electron into 100 W
Noise	2.2 keV FWHM (255 electrons rms)
Noise slope	72 eV/pF FWHM (8 electrons rms/pF)
Rise time (10-90%)	5ns (0pF), 40 ns (100 pF detector capacitance)
Fall time (100-37%)	50 ± 4 µs
Dynamic range	0-200 MeV (± 2 V into 100 W)
Integral non-linearity	<0.1%

Recent Papers

NIM publication

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