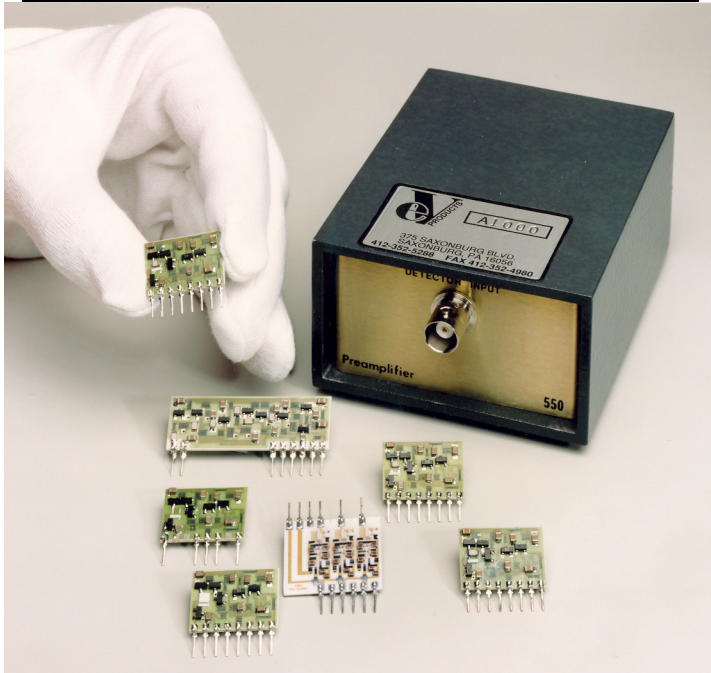


eV-509x Preamplifiers



For Use with:

- CZT detectors
- Si surface barrier detectors
- Photodiodes
- HgI₂
- Proportional gas counters
- Multichannel plate arrays with and without resistive anode readouts

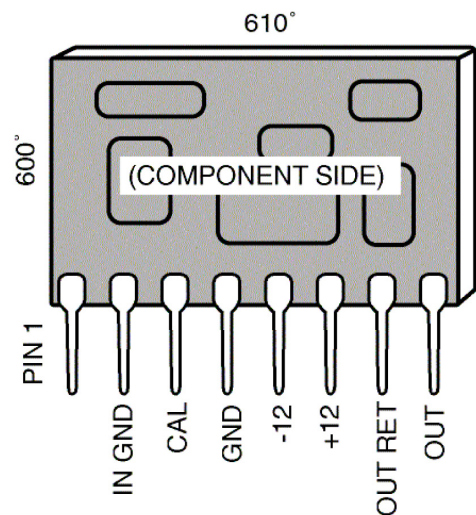
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eV-509x Preamplifiers

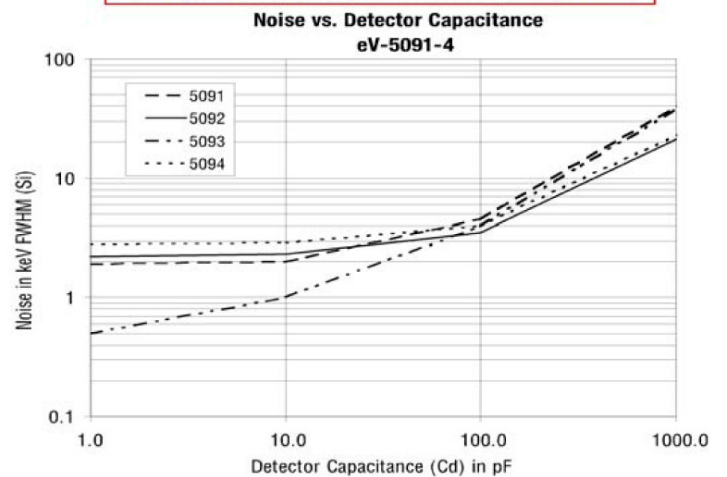
Single Charge-Sensitive Hybrid Preamplifier

The eV-509x product family is a low-noise, general purpose charge sensitive preamplifier designed to exhibit excellent performance with detectors having various source capacitances.

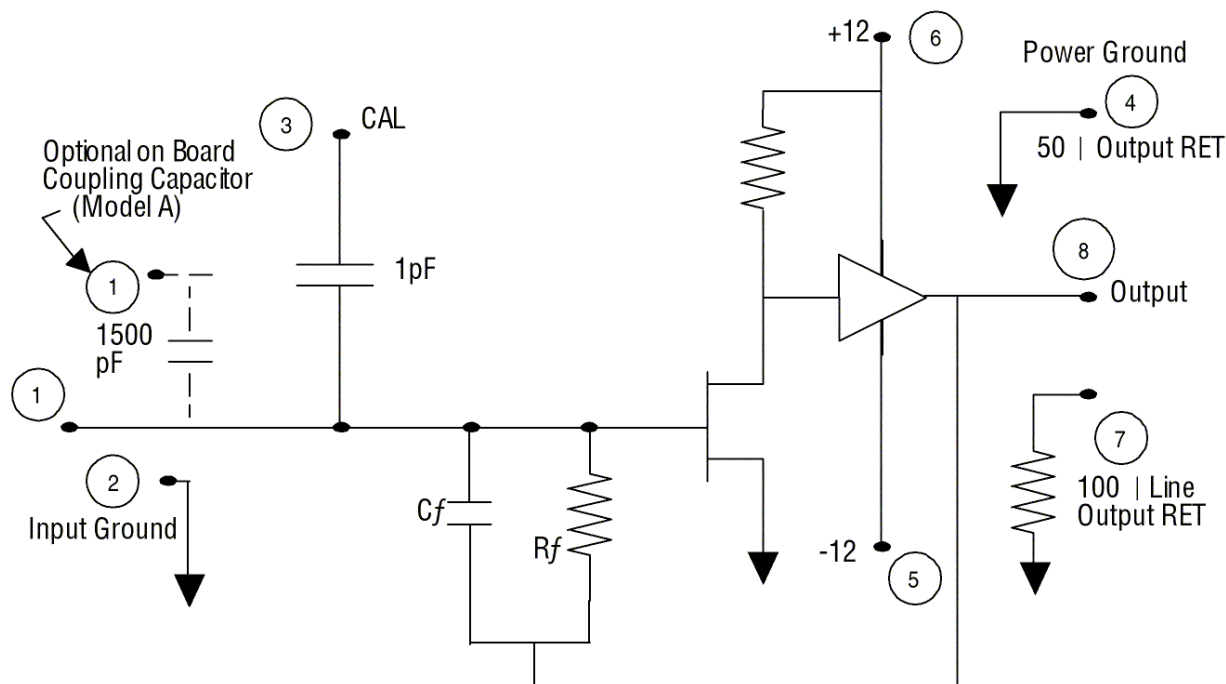
All eV-509x preamplifiers can also be ordered in the standard eV-550 preamplifier box shown above.



Single Channel Hybrid Noise vs. C_d Chart



eV-509x Preamplifiers



Specifications for each of 4 standard units

		eV-5091	eV-5092	eV-5093	eV-5094
Parameter	Unit	Rating	Rating	Rating	Rating
Input Capacitance	pF	12	30	12	30
Risetime @ $C_{in} = 2\text{pF}$	ns	20	15	20	30
Falltime @ $C_{in} = 2\text{pF}$	μs	25	110	1030	1100
Sensitivity*	mV/fC	1.0	0.2	3.6	1.1
	mV/MeV (Si)	44	5	158	48

Parameter	Rating	Unit
Output Impedance	57	ohms
Open Loop Gain	$\sim 10^4$	V/V
Radiation Resistance	$> 10^7$	Rads
Power Dissipation	180	mW

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