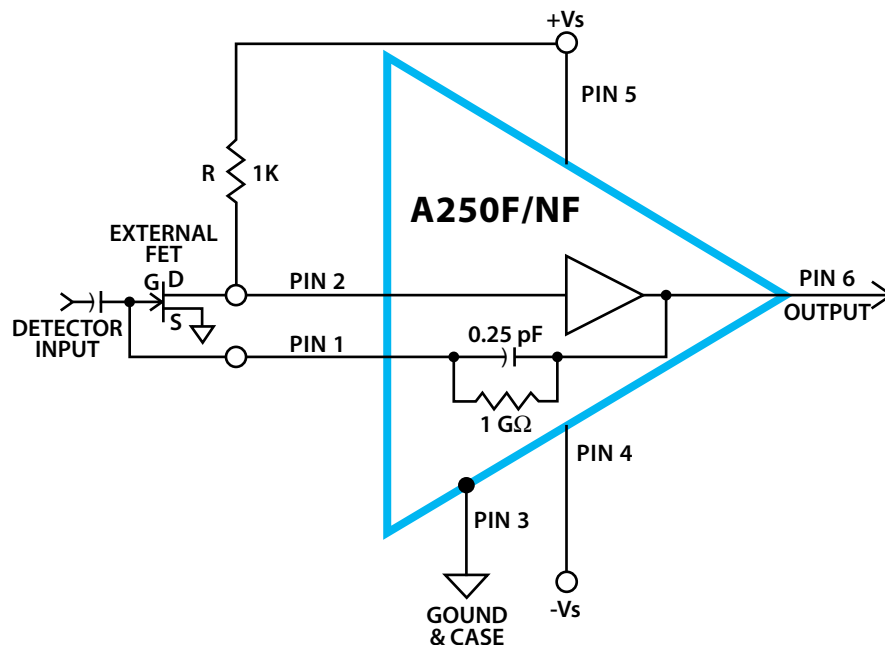


CHARGE SENSITIVE PREAMPLIFIER

A250F/NF

Single In-line Package (SIP)

The A250F/NF is a high density version of the Amptek A250 Charge Sensitive Preamplifier. The input FET is not included and must be added externally.



A250F/NF PIN CONFIGURATION

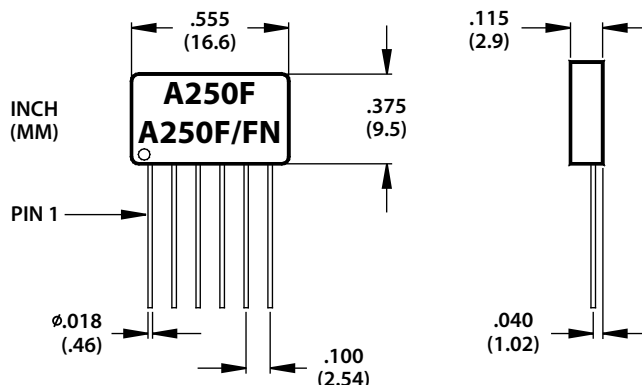
Pin 1	Feedback. Must be connected to the Gate of the FET.
Pin 2	Input. Must be connected to the Drain of the FET.
Pin 3	Ground & Case
Pin 4	-Vs (-6 V Typical)
Pin 5	+Vs (+6 V Typical)
Pin 6	Output

NOTES

1. The internal feedback resistor $R_f = 1 \text{ G}\Omega$.
2. The internal feedback capacitor $C_f = 0.25 \text{ pF}$
Sensitivity (gain) = 175 mV//MeV (Si)
4 V/pC
0.64 $\mu\text{V}/\text{electron}$
3. For lower sensitivity applications, C_f can be increased externally.
4. The external 1 k Ω resistor from Pin 2 to Pin 5 provides the FET with a drain current of $I_{DS} = 2.75 \text{ ma}$.
 I_{DS} can be increased by reducing $R < 1 \text{ k}\Omega$.

Please refer to the A250 specifications for further information.

A250F/NF MECHANICAL DIMENSIONS



AMPTek INC. 14 DeAngelo Drive, Bedford, MA 01730-2204 USA

TEL: +1 (781) 275-2242 FAX: +1 (781) 275-3470 email: sales@amptek.com www.amptek.com