



## CC701HT Charge converter



### SPECIFICATIONS

#### TRANSFER CHARACTERISTICS

<b>Sensitivity, <math>\pm 5\%</math></b>		4 mV/pC
<b>Frequency response<sup>1</sup>:</b>	<b><math>\pm 1</math> dB</b>	2.0 - 10,000 Hz
	<b><math>-3</math> dB</b>	1.0 - 20,000 Hz
<b>Nonlinearity</b>		<1%
<b>Harmonic distortion</b>		<1%

#### INPUT CHARACTERISTICS

<b>Allowable source capacitance, max<sup>2</sup></b>	500 pF
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#### OUTPUT CHARACTERISTICS

Output voltage, max		5 V rms
Electrical noise, nominal:		
Source capacitance (transducer + cable)		1,000 pF
Broadband	2.5 Hz to 25 kHz	100 μV
Spectral	10 Hz	1.41 μV/√Hz
	100 Hz	0.71 μV/√Hz
	1,000 Hz	0.63 μV/√Hz
	10,000 Hz	0.51 μV/√Hz

<b>Output impedance (depending on source capacitance)</b>	25 - 150 $\Omega$
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<b>Bias output voltage</b>	12 $\pm$ 2 VDC
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#### POWER REQUIREMENTS

<b>Voltage source</b>	18 - 30 VDC
<b>Constant current<sup>3</sup></b>	2 - 10 mA

#### ENVIRONMENTAL

<b>Temperature range</b>	-40° to +100°C
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#### PHYSICAL

<b>Weight</b>	40 grams
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<b>Case material</b>	stainless steel
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#### Connectors:

<b>Signal input</b>	Microdot 10-32
<b>Signal output</b>	BNC

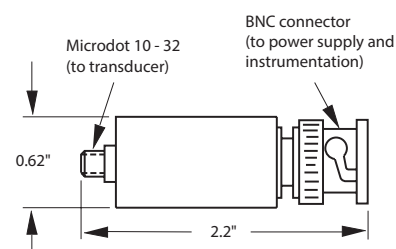
**Notes:** <sup>1</sup> Measured with 500 pF input capacitance.

<sup>2</sup> For -3 dB point greater than 10 kHz/

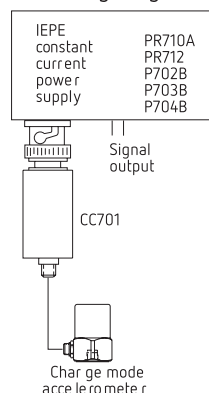
<sup>3</sup> To minimize the possibility of signal distortion when driving long cables with high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables.

#### Key features

- Designed for use with high temperature, charge mode accelerometers
- Immune to cable motion noise
- Manufactured in ISO 9001 facility



#### Powering diagram



Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.