

Model Number 422E55		IN-LINE CHARGE AMPLIFIER			Revision: B ECN #: 37900											
Performance		ENGLISH	SI	OPTIONAL VERSIONS												
Sensitivity(± 2.5 %)(Charge Conversion)		0.5 mV/pC	0.5 mV/pC	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.												
Overrange		± 8 V	± 8 V													
Low Frequency Response(-5 %)		0.5 Hz	0.5 Hz													
High Frequency Response(-5 %)		100 kHz	100 kHz													
Non-Linearity		≤ 1.0 % FS	≤ 1.0 % FS	NOTES: [1] Typical. [2] High frequency response may be limited by supply current and output cable length. [3] See PCB Declaration of Conformance PS024 for details. A low impedance connection from case to earth ground is required to maintain CE compliance.												
Environmental																
Temperature Range(Operating)		-65 to +250 °F	-54 to +121 °C													
Maximum Shock		5000 g pk	49,050 m/s² pk													
Maximum Vibration(5 to 2000 Hz)		100 g pk	981 m/s² pk													
Electrical																
Excitation Voltage		+18 to 28 VDC	+18 to 28 VDC													
Constant Current Excitation		2 to 20 mA	2 to 20 mA													
Output Voltage		± 5.0 V	± 5.0 V													
Output Polarity		Inverted	Inverted													
Output Impedance		100 ohm	100 ohm													
Output Bias Voltage		+9 to 13 VDC	+9 to 13 VDC													
Maximum Input Voltage		+30 V	+30 V													
Broadband Electrical Noise(1 to 10,000 Hz)		33 µV	-90 dB													
Spectral Noise(1 Hz)		9.8 µV/√Hz	-100 dB													
Spectral Noise(10 Hz)		3 µV/√Hz	-110 dB													
Spectral Noise(100 Hz)		0.8 µV/√Hz	-122 dB													
Spectral Noise(1 kHz)		0.4 µV/√Hz	-128 dB													
Spectral Noise(10 kHz)		0.2 µV/√Hz	-134 dB													
Capacitance(Feedback)		2000 pF	2000 pF													
Overload Recovery Time		10 µsec	10 µsec													
Discharge Time Constant		>1 sec	>1 sec													
Resistance(Feedback)		1.5x10 ⁹ ohm	1.5x10 ⁹ ohm													
Source Capacitance Loading(at input)		-0.0005 %/pF	-0.0005 %/pF													
Physical				<table><tr><td>Entered: DMW</td><td>Engineer: KL</td><td>Sales: JJM</td><td>Approved: BAM</td><td>Spec Number:</td></tr><tr><td>Date: 12/14/2011</td><td>Date: 12/14/2011</td><td>Date: 12/14/2011</td><td>Date: 12/14/2011</td><td>37943</td></tr></table>			Entered: DMW	Engineer: KL	Sales: JJM	Approved: BAM	Spec Number:	Date: 12/14/2011	Date: 12/14/2011	Date: 12/14/2011	Date: 12/14/2011	37943
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Housing Material		Stainless Steel	Stainless Steel													
Sealing		Epoxy	Epoxy													
Electrical Connector(Input)		10-32 Coaxial Jack	10-32 Coaxial Jack													
Electrical Connector(Output)		BNC Jack	BNC Jack													
Size (Diameter x Length)		0.52 in x 3.4 in	13 mm x 86 mm	Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: electronics@pcb.com												
Weight		1.15 oz	32.7 gm													
																
[3]																
All specifications are at room temperature unless otherwise specified. In the interest of constant product improvement, we reserve the right to change specifications without notice. ICP® is a registered trademark of PCB Group, Inc.																
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