Model Number 422E55/D	IN-LINE CHARGE CONVERTER	Revision: C ECN #: 56504

Performance	ENGLISH	SI	
Sensitivity(± 2.5 %)(Charge Conversion)	0.5 mV/pC	0.5 mV/pC	
Input Range	± 10,000 pC	± 10,000 pC	
Overrange	± 8 V	± 8 V	
Low Frequency Response(- 5 %)	0.5 Hz	0.5 Hz	
High Frequency Response(- 5 %)	100 kHz	100 kHz	[1]
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	
Environmental			
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Maximum Shock	5,000 g pk	49,050 m/s² pk	
Maximum Vibration(5 to 2,000 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 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	[2]
Spectral Noise(10 Hz)	3 µV/√Hz	-110 dB	[2]
Spectral Noise(100 Hz)	0.8 µV/√Hz	-122 dB	[2]
Spectral Noise(1 kHz)	0.4 µV/√Hz	-128 dB	[2]
Spectral Noise(10 kHz)	0.2 µV/√Hz	-134 dB	[2]
Capacitance(Feedback)	2,000 pF	2,000 pF	
Overload Recovery Time	10 µsec	10 µsec	
Discharge Time Constant	> 1 sec	> 1 sec	
Resistance(Feedback)	$15x10^{10}$ Ohm	$15x10^{10}$ Ohm	
Source Capacitance Loading(at input)	- 0.0005 %/pF	- 0.0005 %/pF	
Physical			
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Epoxy	Epoxy	
Electrical Connector(Input)	BNC Jack	BNC Jack	
Electrical Connector(Output)	BNC Jack	BNC Jack	
Size (Diameter x Length)	0.50 in x 3.4 in	13 mm x 86 mm	
Weight	1.15 oz	32.7 gm	

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

[1]High frequency response may be limited by supply current and output cable length.
[2]Typical.

CE

UK CA

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.
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Entered: ND	Engineer: CPH	Sales: AH	Approved: JWH	Spec Number:
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