

DOC NO **Model Number** PERFORMANCE SPECIFICATION 4705M4 PS4705M4

CHARGE AMPLIFIER. IN-LINE

REV A. ECN 12922, 08/23/16



- FAST TURN ON TIME
- MINIATURE PACKAGE

PHYSICAL Weight, Max Connector Input Sig/Pwr BNC Jack BNC Jack			ENGLISH		SI	
Connector Input Sig/Pwr BNC Jack 300 Series S.S. Case Grounded	PHYSICAL					
Housing Sig/Pwr BNC Jack 300 Series S.S. 300 Series S.S. Case Grounded Case Grounded	Weight, Max		1.2	oz	33	grams
Housing Material Isolation Source Series S.S. Case Grounded Case Grounded Case Grounded	Connector	Input	10-32 Jack		10-32 Jack	-
Isolation Case Grounded Case Grounded		Sig/Pwr	BNC Jack		BNC Jack	
PERFORMANCE Sensitivity, ±10% 10.0 mV/pC 10.0 mV/pC Input Range, ±5V out ±500 pC ±500 pC Low Frequency Response, - 3dB / -5% 0.32 / 0.96 Hz 0.32 / 0.96 Hz High Frequency Response [2] Hz [2] Hz Feedback Capacitor 100 pF 100 pF Thermal Coefficient of Sensitivity, Max. 0.02 %/°F 0.04 %/°C Minimum Source Resistance 200 MΩ 200 MΩ ELECTRICAL Supply Current Range [1] 2 to 20 mA 2 to 20 mA Compliance Voltage Range +18 to +30 VDC +18 to +30 VDC Output Impedance, Typ. 100 Ω 100 Ω Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Housing	Material	300 Series S.S.		300 Series S.S.	
Sensitivity, ±10%		Isolation	Case Grounded		Case Grounded	
Input Range, ±5V out	PERFORMANCE					
Low Frequency Response, - 3dB / -5% 0.32 / 0.96 Hz 0.32 / 0.96 Hz High Frequency Response [2] Hz [2] Hz Feedback Capacitor 100 pF 100 pF Thermal Coefficient of Sensitivity, Max. 0.02 %/°F 0.04 %/°C Minimum Source Resistance 200 MΩ 200 MΩ ELECTRICAL Supply Current Range [1] 2 to 20 mA 2 to 20 mA Compliance Voltage Range +18 to +30 VDC +18 to +30 VDC Output Impedance, Typ. 100 Ω 100 Ω Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Sensitivity, ±10%		10.0	mV/pC	10.0	mV/pC
3dB / -5% 0.32 / 0.96 Hz 0.32 / 0.96 Hz	Input Range, ±5V out		±500	рC	±500	рC
Feedback Capacitor			0.32 / 0.96	Hz	0.32 / 0.96	Hz
Thermal Coefficient of Sensitivity, Max. 0.02 $\%$ /°F 0.04 $\%$ /°C Minimum Source Resistance 0.02 0.02 0.02 0.04 0.04 0.05 0.05 0.04 0.05 0.04 0.05	High Frequency Response		[2]	Hz	[2]	Hz
Minimum Source Resistance 200 MΩ 200 MΩ ELECTRICAL Supply Current Range [1] 2 to 20 mA 2 to 20 mA Compliance Voltage Range +18 to +30 VDC +18 to +30 VDC Output Impedance, Typ. 100 Ω 100 Ω Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Feedback Capacitor		100	pF	100	pF
ELECTRICAL Supply Current Range [1] 2 to 20 mA 2 to 20 mA Compliance Voltage Range +18 to +30 VDC +18 to +30 VDC Output Impedance, Typ. 100 Ω 100 Ω Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Thermal Coefficient of Sensitivity, Max.		0.02	%/°F	0.04	%/°C
Supply Current Range [1] 2 to 20 mA 2 to 20 mA Compliance Voltage Range +18 to +30 VDC +18 to +30 VDC Output Impedance, Typ. 100 Ω 100 Ω Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Minimum Source Resistance		200	ΜΩ	200	ΜΩ
	ELECTRICAL					
	Supply Current Range [1]		2 to 20	mA	2 to 20	mA
Output Bias Voltage 11 VDC 11 VDC Discharge Time Constant 0.5 sec 0.5 sec	Compliance Voltage Range		+18 to +30	VDC	+18 to +30	VDC
Discharge Time Constant 0.5 sec 0.5 sec			100	==	100	==
ENVIRONMENTAL						
	Discharge Time Constant		0.5	sec	0.5	sec
Shock Max. 2000 g pk 19620 m/s²	ENVIRONMENTAL					
	Shock Max.		2000	g pk	19620	m/s ²
Vibration Max. 300 g pk 2943 m/s ²	Vibration Max.		300	g pk	2943	m/s ²
Operating Temperature -50 to +185 °F -46 to +85 °C	Operating Temperature		-50 to +185	°F	-46 to +85	°C
Seal Epoxy Epoxy	Seal		Ероху		Ероху	

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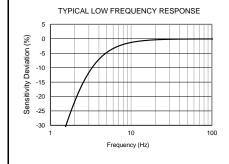
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Model	Sensitivity (mV/pC)	Range (pC)	Insulation Resistance (Ω)	Feedback Capacitor (pF)				

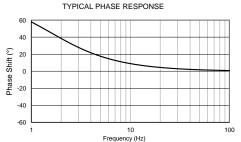
Refer to the performance specifications of the products in this family for detailed description

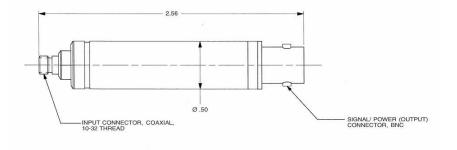
Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

- [1] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier.
- [2] High frequency response depends upon drive current and cable length, since there is no filtering.







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-4705M4 for more information.

