Model Number	DIFFERENTIAL DIN RAIL CHARGE AMPLIFIER	Revision: NR
EX682M94		ECN #: 50514

Performance	ENGLISH	SI	
Sensitivity(+/- 5 %)	0.1 mV/pC	0.1 mV/pC	
Input Range	+/- 25,000 pC	+/- 25,000 pC	
Low Frequency Response(- 3 dB)	5 Hz	5 Hz	[1][2]
High Frequency Response(- 3 dB)	10 kHz	10 kHz	[3][2]
Amplitude Linearity	1 %	1 %	
Environmental			
Temperature Range(Operating)	-40 to +176 °F	-40 to 80 °C	
Temperature Response	≤ 1 %	≤ 1 %	
Relative Humidity(Non Condensing)	< 95 %	< 95 %	
Electrical			
Excitation Voltage	22 to 28 VDC	22 to 28 VDC	
Output Bias Voltage	10 to 12 VDC	10 to 12 VDC	
Output Voltage	+/- 2.5 Vpk	+/- 2.5 Vpk	
Constant Current Excitation	3.1 to 4.1 mA	3.1 to 4.1 mA	
Broadband Electrical Noise(1 to 10,000 Hz)	330 µV	-70 dB	[4]
Spectral Noise(1 Hz)	10 µV/√Hz	-100 dB	[4]
Spectral Noise(10 Hz)	15 µV/√Hz	-96 dB	[4]
Spectral Noise(100 Hz)	5 µV/√Hz	-106 dB	[4]
Spectral Noise(1 kHz)	5 µV/√Hz	-106 dB	[4]
Spectral Noise(10 kHz)	5 µV/√Hz	-106 dB	[4]
Discharge Time Constant	> 0.02 sec	> 0.02 sec	
Resistance	> 50,000 Ohm	> 50,000 Ohm	
Source Capacitance Loading	0.0003 %/pF	0.0003 %/pF	
Output in Relation to Input	In Phase	In Phase	
Physical			
Mounting	DIN Rail	DIN Rail	
Case Material	Injected Molded Nylon	Injected Molded Nylon	
Weight	5.1 oz	145 gm	

CE[5]

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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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]The low frequency tolerance is accurate within ±20% of the specified frequency.
[2]12dB/Octave
[3]The high frequency tolerance is accurate within ±20% of the specified frequency.
[4]Tested using voltage source and input capacitor equal to the feedback capacitor, to simulate a charge output sensor. Values are typical.
[5]See PCB Declaration of Conformance PS123 for details.

Entered: LK	Engineer: gs	Sales: DPC	Approved: RPF	Spec Number:
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