Model Number	MICROPHONE PREAMPLIFIER	Revision: C
426A11		ECN #: 29545

Performance	ENGLISH	SI	
Nominal Microphone Diameter	1/2"	1/2"	
Gain(re 1 kHz)	-0.16 dB	-0.16 dB	[1][3]
Filter Type(3-pole Butterworth)	High Pass	High Pass	[2]
Electrical Filter Corner Frequency	20 Hz	20 Hz	[1]
Filter Type	A-weight	A-weight	[4][2]
Frequency Response(± 0.2 dB)	5 to 125,000 Hz	5 to 125,000 Hz	[5][6]
Frequency Response(± 1.6 dB)(A-weight Filter Engaged)	12.6 to 20,000 Hz	12.6 to 20,000 Hz	[5][6]
Frequency Response(± 1.0 dB)(A-weight Filter Engaged)	20 to 10,000 Hz	20 to 10,000 Hz	[1][6]
Frequency Response(± 0.3 dB)(+20 dB Gain)	4 to 25,000 Hz	4 to 25,000 Hz	[6]
Phase Linearity(-3 to +10 °)	5 to 20 Hz	5 to 20 Hz	[3][7]
Phase Linearity(± 3 °)	20 to 20,000 Hz	20 to 20,000 Hz	[3][7]
Electrical Noise(A Weight, 0 dB Gain)	<7.5 µV	<7.5 µV	[3][8]
Electrical Noise(A Weight, 0 dB Gain)	5 µV	5 µV	[3][1][8]
Electrical Noise(0 dB Gain)	<5.7 µV	<5.7 µV	[3][8]
Electrical Noise(0 dB Gain)	4.2 µV	4.2 µV	[3][1][8]
Electrical Noise(+20 dB Gain)	<60 µV	<60 µV	[8][3]
Electrical Noise(+20 dB Gain)	40 µV	40 µV	[3][1][8]
Electrical Noise(High Pass Filter, 0 dB Gain)	<5.6 µV	<5.6 µV	[3][8]
Electrical Noise(High Pass Filter, 0 dB Gain)	3.7 µV	3.7 µV	[3][1][8]
Distortion(5 V pk output at 1 kHz)	<-60 dB	<-60 dB	[3]
Output Slew Rate	2 V/µS	2 V/µS	[1]
TEDS Compliant	Yes	Yes	[9]
Environmental			
Temperature Range(Operating)	-4 to +158 °F	-20 to +70 °C	
Temperature Response	<0.05 dB	<0.05 dB	
Humidity Range(Non-Condensing)	0 to 95 %RH	0 to 95 %RH	
Humidity Sensitivity	<0.05 dB	<0.05 dB	
Electrical			
Excitation Voltage	22 to 34 VDC	22 to 34 VDC	
Constant Current Excitation	4 to 20 mA	4 to 20 mA	
Impedance(Input)	10 Gohm	10 Gohm	[1]
Capacitance(Input)	0.28 pF	0.28 pF	[1]
Output Bias Voltage	15 VDC	15 VDC	[1]
Maximum Input Voltage(0 dB gain)	5 Vpk	5 Vpk	[2]
Maximum Input Voltage(+20 dB gain)	0.5 Vpk	0.5 Vpk	[2]
Impedance(at 1 kHz)(Output)	<50 ohm	<50 ohm	
Output Voltage(Maximum)	5 Vpk	5 Vpk	
Physical			
Housing Material	Stainless Steel	Stainless Steel	
Size (Diameter x Length)	0.5 in x 4.25 in	12.7 mm x 108.0 mm	
Weight	1.5 oz	43.7 gm	
Electrical Connector	BNC Jack	BNC Jack	
Mounting Thread(Microphone to Preamplifier)	0.4606 - 60 UNS	11.7 mm - 60 UNS	

CE [10]

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.

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] Typical.
[2] Overload detection is in front of filters. Positive pulses at output indicate overload.
[3] Measured with an 18 pF reference microphone.
[4] Per IEC 61672-1:2002 "Sound Level Meters" Class 1
[5] Error from ideal A weight re 1 kHz.
[6] re 1 kHz
[7] Without Filter or +20 dB gain engaged.
[8] 20 Hz to 20 kHz
[9] TEDS Capable Digital Memory and Communication, compliant with IEEE P1451.4
[10] See PCB Declaration of Conformance PS074 for details.

SUPPLIED ACCESSORIES:

Model ERC-16 Calibration of microphone preamplifier (1)

Entered: BLS	Engineer: JE	Sales: MV	Approved: EB	Spec Number:
Date: 10-17-08	Date: 10-13-08	Date: 10-15-08	Date: 10-16-08	34951

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