### **Model Number** 378C01

# **ICP MICROPHONE SYSTEM**

Revision: J ECN #: 49878

3/8001			
Performance	ENGLISH	SI	
Nominal Microphone Diameter	1/4"	1/4"	
Frequency Response Characteristic(at 0°	Free-Field	Free-Field	
incidence)			
Sensitivity	2.0 mV/Pa	2.0 mV/Pa	[1]
Sensitivity(± 3 dB)	- 54 dB re 1 V/Pa	- 54 dB re 1 V/Pa	[1]
Frequency Range(+2 / -3 dB)	4 to 100,000 Hz	4 to 100,000 Hz	
Frequency Range(± 2 dB)	5 to 80,000 Hz	5 to 80,000 Hz	
Frequency Range(± 1 dB)	7 to 12,500 Hz	7 to 12,500 Hz	
Lower Limiting Frequency(- 3 dB)	0.75 to 4.0 Hz	0.75 to 4.0 Hz	
Inherent Noise	42 dB(A) re 20 μPa	42 dB(A) re 20 μPa	[2][3]
Dynamic Range (3% Distortion Limit)	165 dB re 20 μPa	165 dB re 20 μPa	[3]
TEDS Compliant	Yes	Yes	[4]
Environmental			
Temperature Range(Operating)	-40 to +176 °F	-40 to +80 ℃	[5]
Temperature Coefficient of Sensitivity(+14	0.003 dB/°F	0.006 dB/°C	[3][1]
to +158°F (-10 to +70°C))			
Static Pressure Coefficient	- 0.009 dB/kPa	- 0.009 dB/kPa	[3][1]
Humidity Coefficient of Sensitivity(0 to	± 0.0014 dB/%RH	± 0.0014 dB/%RH	[1]
100%, non-condensing)			
Influence of Axial Vibration(0.1g (1 m/s²))	60 dB re 20 μPa	60 dB re 20 μPa	[3]
Electrical			
Polarization Voltage	0 V	0 V	[6]
Excitation Voltage	20 to 32 VDC	20 to 32 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Bias Voltage	10 to 14 VDC	10 to 14 VDC	
Maximum Output Voltage	± 8 Vpk	± 8 Vpk	
Output Impedance	< 50 Ohm	< 50 Ohm	
Physical			
Housing Material	Stainless Alloy	Stainless Alloy	
Venting	Rear	Rear	[7]
Electrical Connector	10-32 Jack	10-32 Jack	
Mounting Thread(Grid)	0.25 - 60 UNS	0.25 - 60 UNS	
Size - Diameter(with grid)	0.28 in	7.1 mm	
Size - Diameter(without grid)	0.25 in	6.35 mm	
Size - Height(with grid)	2.07 in	52.6 mm	
Size - Height(without grid)	2.02 in	51.3 mm	
Weight	0.27 oz	7.8 gm	[3]

#### **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]re 250 Hz

[2]A-Weighted inherent noise is specified from 20 Hz - 20 kHz.

[4]TEDS Capable Digital Communication, compliant with IEEE 1451.4 [5]Limited to 70°C if ICP current > 10mA

[6]Prepolarized

[7] Venting through Preamp.

[8] See PCB Declaration of Conformance PS167 and PS076 for details.

## **SUPPLIED ACCESSORIES:**

Model ACS-63 Calibration (with TEDS) of Precision Condenser Microphones and Preamplifiers together (mated pair). (1)

Entered: Ink	Engineer: MJN	Sales: MV	Approved: BAM	Spec Number:
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