

STEEL. TOP AND BOTTOM SURFACES, 17-4 PH ST. STEEL

SHEET

FORCE SENSOR, SERIES 1061V

Model Number
1061V3

PERFORMANCE SPECIFICATION

Force Sensors, IEPE

Doc No
PS1061V3

REV B, ECN 15074, 05/13/19



- DYNAMIC FORCE SENSOR
- VOLTAGE MODE
- EXCELLENT LINEARITY

		ENGLISH		SI	
PHYSICAL		-	•	,	
Weight, Max.		15.82	oz	452	grams
Connector	Type	Coaxial	1	Coaxial	
	Thread	10-32	1	10-32	
Housing	Material	Stainless steel		Stainless steel	
	Isolation	Case grounded		Case grounded	
Sensing Element	Material	Quartz		Quartz	
	Mode	Compression		Compression	
PERFORMANCE					
Sensitivity, +/-10%		1	mV/Lb	0.22	mV/N
Compression Range		5000	Lbs.Force	22240	N
Maximum Compression , +/-5%		30000	Lbs.Force	133440	N
Tension Range		1000	Lbs.Force	4448	N
Maximum Tension [1], +/-5%		1000	Lbs.Force	4448	N
Resolution		.07	Lb. RMS	0.31136	N RMS
Linearity [2]		± 1	% Full Scale	± 1	% Full Scale
Mounted Resonance (Unloaded)		≥ 75	kHz	≥ 75	kHz
Stiffness		50	Lb/µin	8.66	kN/μm
ENVIRONMENTAL					
Coefficient Of Thermal Sensitivity		0.03	%/°F	0.05	%/°C
Operating Temperature		-100 to +250	°F	-73 to +121	°C
Maximum Vibration		±3000	g's,Peak	±29400	m/s^2 Peak
Maximum Shock		5,000	g's,Peak	49,000	m/s^2 Peak
Environmental Seal		Epoxy		Ероху	
ELECTRICAL					
Supply Current [3]		2 to 20	mA	2 to 20	mA
Compliance Voltage		18 to 30	VDC	18 to 30	VDC
Discharge Time Constant, Min.		1500	Seconds	1500	Seconds
F.S. Output Voltage		5	Volts	5	Volts
Output Impedance		100	Ω	100	Ω
		<u> </u>	-1	<u> </u>	1

7.5 to 9.5

VDC

7.5 to 9.5

This family also includes:							
Model	Sensitivity (mV/Lb)	Range (LbsF) Compressive, Tensile	Max Force (LbsF) Compressive, Tensile	Discharge Time Constant (Sec)			
1061V1	10	500, 500	10000, 1000	150			
1061V2	5	1000, 1000	20000, 1000	300			
1061V4	0.5	10000, 1000	40000, 1000	2000			
1061V5	0.2	25000, 1000	50000, 1000	2000			
1061V6	0.1	50000, 1000	60000, 1000	2000			

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

Supplied Accessories:

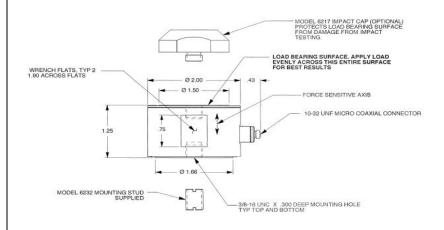
- 1) Accredited Calibration Certificate (ISO 17025)
- 2) MOD 6232 MOUNTING STUDS (2)

Available Accessories:

1) MOD 6217 STAINLESS STEEL IMPACT CAP

Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, zero based best-fit sraight line method.
- [3] Power these instruments only with constant current type power units. Do not connect to a source of voltage without current limiting. This will destroy the integral IC amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1061V for more information.



Bias Voltage

VDC