

Model Number 1051C	PERFORMANCE SPECIFICATION	
	DYNAMIC FORCE SENSOR, CHARGE MODE	REV A, ECN 12897, 08/18/16



- COMPRESSIVE & TENSILE LOADINGS
- EXCELLENT LINEARITY
- CHARGE MODE

		ENGLISH		SI		
PHYSICAL						
Weight, Max.		1.1	oz	32	grams	
Connector		10-32		10-32		
Material	Housing	Stainless Steel		Stainless Steel		
	Connector	Stainless Steel		Stainless Steel		
Sensing Element	Material	Quartz		Quartz		
	Mode	Compression	]	Compression		
PERFORMANCE						
Sensitivity, ± 15 %		-18	pC/lbf	-4.0	pC/N	
Compression Range		5,000	lbf	22,241	N	
Maximum Compression		15,000	lbf	66,723	N	
Tension Range		500	lbf	2,224	N	
Maximum Tension [1]		1,000	lbf	4,448	N	
Linearity [2]		±1	% Full Scale	±1	% Full Scale	
Resonant Frequency, Unloaded		>75	kHz	>75	kHz	
Stiffness, Force Sensor		11.4	lbf/µin	2.0	kN/μm	
ENVIROMENTAL						
Maximum Shock, Unloaded		10,000	g pk	98100	m/s <sup>2</sup>	
Maximum Vibration, Unloaded		2,500	g pk	24525	m/s <sup>2</sup>	
Temperature Range		-100 to +500	°F	-73 to +260	°C	
Thermal Coefficient		0.03	%/°F	0.05	%/°C	
Seal		Welded/Epoxy	]	Welded/Epoxy		
ELECTRICAL						
Capacitance		18	pF	18	pF	
Insulation Resistance		1E+12	Ω	1E+12	Ω	
			=			

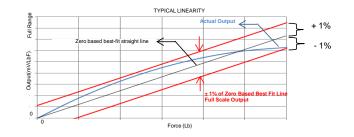
This family also includes:										
Model	Sens. (pC/lbf)	Compression Range (lbf)	Max. Compression (lbf)	Tension Range (lbf)	Max. Tension (lbf)					

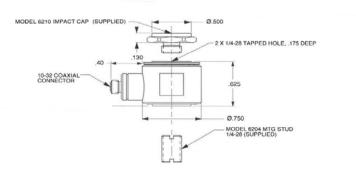
Refer to the performance specifications of the products in this family for detailed description.

## Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) MOD 6210 STEEL IMPACT CAP
- 3) MOD 6204 1/4-28 MOUNTING STUD

Notes:
[1] Absolute maximum tension. Do not exceed in any case!
[2] Percent of full scale or any lesser range, zero based best-fit straight line method.





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1051C for more information.

