

172-0081, REV D

Model Number 3166B	PERFORMANCE SPECIFICATIONS								DOC NO PS3166B
	IEPE SINGLE			NGLE AXIS AC	AXIS ACCELEROMETER				REV A, ECN 15647, 03/19/20
(This family also includes:				
	ELECTRICALLY ISOLATEI	ר			Model	Sensitivity (V/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)
	HERMETICALLY SEALED	-			3166B1	0.5	0.3 to 5000	0.9 to 2.0	-60 to +250
+ DYTRAL					3166B2	0.01	0.3 to 5000	0.9 to 2.0	-60 to +250
S/N XGB									
s soomvig					Refer to the perfo	ormance specifications	of the products in this family fo	or detailed description	
					Supplied Acces	sories:			
	ENGLISH	SI		1) Accredited calibration certificate (ISO 17025)					
PHYSICAL					2) Model 6523, 1	/4-28 Captive, Socket H	lead Cap Screw		
Weight, Max	8	oz	228	grams					
Connector Type	2 -PIN, MIL-C-5015-10SL-4P		2 -PIN, MIL-C-5015-10SL-4P		Notes:				
Mounting Provision Material, Housing/Connector	CAPTIVE 1/4-28 SCREW 300 SERIES SS		CAPTIVE 1/4-28 SCREW 300 SERIES SS			100Hz, 1 grms per ISA I		ossor rango	
Sensing Element	Ceramic		Ceramic		[2] Measured using zero-based straight line method, % of F.S. or any lesser range. [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will dest				the amplifier
Element Style	Planar Shear		Planar Shear				provement, we reserve the right		
	·						ate that a particular product w		
PERFORMANCE							cular application. Parameters		
Sensitivity, ±5% [1]	100	mV/g	10	mV/m/s ²			rformance may vary overtime.		
Range for ± 5 Volts Output	50	g peak	491	m/s ²	parameters, mus	t be validated for each	customer application by the cu	istomer's technical expe	rts.
Frequency Response, ±10% Resonant Frequency	0.3 to 5000 > 21	Hz kHz	0.3 to 5000 > 21	Hz kHz		10	TYPICAL LOW FREQUENCY RESPONSE		
Equivalent Electrical Noise Floor	0.0005	Grms	0.005	m/s ² rms		10			
Linearity [2]	±2	% F.S.	±2	% F.S.		ž 0			
Maximum Transverse sensitivity	5	%	5	%					
Strain Sensitivity @ 250με	0.0001	g/µɛ	0.001	m/s²/με		На -15			
ENVIRONMENTAL						Ê .25			
Maximum Vibration	350	g peak	3434	m/s ² peak		8 -30			
Maximum Shock	3000	g peak	29430	m/s ² peak					
Operating Temperature Range Seal	-60 to +250 Hermetic	°F	-51 to 121 Hermetic	°C		0.1	1 10 FREQUENCY (HZ)	0 100	
	Tieffiletic		nemetic			-	2.81	-	
ELECTRICAL Supply Current Range [3]	2 to 20	mA	2 to 20	mA		-	[37.2]		
Compliance Voltage Range	+20 to +30	mA Volts	2 to 20 +20 to +30	MA Volts			· · ·	2-PIN CONNECTO	P
Output Impedence, Typ	200	Ω	200	Ω		100		5/8-24 UNEF-2A	
Bias Voltage	+11 to +13	VDC	+11 to +13	VDC		1.00 [25.4])Q //	10SL-4P HERMETI	С
Discharge Time Constant	0.9 to 2.0	Sec	0.9 to 2.0	Sec				ы	
Electrical Isolation (Pwr/Signal Ground to Case Isolation)	10	GΩ,min	10	GΩ,min	MODEL 6523 1/4-28 UNF-2A CAPTIVE SOCKET HEAD				
Output Signal Polarity for Acceleration Toward Top	Positive		Positive					SOCKET HEAD EW, SUPPLIED	
							2.83	(16)	
							F [21] F SEALIN	[3.9]) IG SURFACE	
					Units on the line drawing	ng are in inches, units in bracket	s are in millimeters. Refer to 127-3166B	tor more information.	
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