

Model Number 3100D24T PERFORMANCE SPECIFICATIONS DOC NO PS3100D24T

IEPE ACCELEROMETER REV B, ECN 13675, 07/21/17



- HIGH SENSITIVITY
- HERMETICALLY SEALED
- CASE ISOLATED
- TEDS FEATURE

		ENGL	ENGLISH		SI	
PHYSICAL					_	
Weight, Max.		1.9	oz	55	grams	
Connector, Type		10-32 UNF-2A		10-32 UNF-2A		
Material, Housing & Connector		300 Series S.S.		300 Series S.S.		
Sensing Element		Ceramic		Ceramic		
Mounting Provision		10-32 UNF-2A	]	10-32 UNF-2A		
PERFORMANCE						
Sensitivity, ±5% [1]		1,000	mV/g	102	mV/m/s <sup>2</sup>	
Range for ± 5 Volts Output		±5	g	±49.1	m/s <sup>2</sup>	
Frequency Response, ±5%		0.6 to 1000	Hz	0.6 to 1000	Hz	
, ±10%		0.5 to 5000	Hz	0.5 to 5000	Hz	
Resonant Frequency		>26	kHz	>26	kHz	
Broadband Resolution, Max.		0.000075	Grms	0.0007	m/s <sup>2</sup> rms	
Spectral Noise, Typ.	1 Hz	0.9	μGrms/v(Hz)	8.5	μm/s² rms/√(Hz)	
	10 Hz	4.3	μGrms/v(Hz)	42.5	μm/s² rms/√(Hz)	
	100 Hz	3.3	μGrms/v(Hz)	32.0	μm/s² rms/√(Hz)	
	1000 Hz	0.6	μGrms/v(Hz)	6.2	μm/s² rms/√(Hz)	
Linearity [2]		±2	% F.S.	±2	% F.S.	
Transverse Sensitivity, Max.		5	%	5	%	
ENVIRONMENTAL						
Maximum Vibration		±100	Gpeak	±981	m/s <sup>2</sup> peak	
Maximum Shock		±200	Gpeak	±1962	m/s² peak	
Temperature Range		-60 to +250	- °F	-51 to 121	°C	
TEDS Operating Temperature		-40 to +185	°F	-40 to +85	°C	
Coefficient of Thermal Sensitivity	,	0.03	%/°F	0.06	%/°C	
Seal		Hermetic	1	Hermetic		
ELECTRICAL						
Supply Current Range [3]		2 to 20	mA.	2 to 20	T mA	
Compliance Voltage Range		+18 to +30	Volts	+18 to +30	Volts	
Output Impedance, Typ.		100	Ω	100	Ω	
Bias Voltage		+11 to +13	VDC	+11 to +13	VDC	
Discharge Time Constant		0.5 to 2.0	Sec	0.5 to 2.0	Sec	
Electrical Isolation		10	GΩ,min	10	GΩ,min	
TEDS Feature		IEEE 1451.4		IEEE 1451.4		

This family also includes:								
Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)				

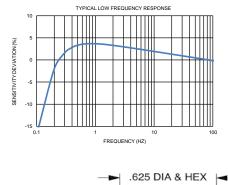
Refer to the performance specifications of the products in this family for detailed description

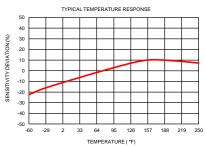
## Supplied Accessories:

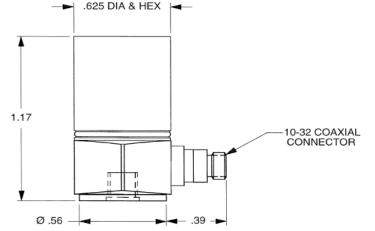
- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud, Model 6200 (10-32 UNF-2A to 10-32 UNF-2A), Qty: 1
- 3) Thermal Boot, Model 6215, Qty: 1

## Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [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 destroy the IC charge amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3100D24T or more information.

