

Model Number
3145A1

PERFORMANCE SPECIFICATIONS

DOC NO
PS3145A1

IEPE ACCELEROMETER

REV B. CON 11062, 12/16/15

SI

DYTRAM S145A SN XXX

• MINIATURE DESIGN

• HERMETICALLY SEALED

ENGLISH

PHYSICAL						
Weight						
Connector						
Mounting Provision						
Material, Housing/Connector						
Sensing Element						
Element Style						

PERFORMANCE

Sensitivity, ±10% [1]
Range for ± 5 Volts Output
Frequency Response, ± 10%
Resonant Frequency
Equivalent Electrical Noise Floor
Linearity, [2]
Maximum Transverse Sensitivity
Strain Sensitivity @ 250µɛ

ENVIRONMENTAL

Maximum Vibration Maximum Shock Temperature Range Seal

Supply Current Range [3]

ELECTRICAL

Compliance Voltage Range
Output Impedence, Typ
Bias Voltage
Discharge Time Constant
Output Signal Polarity for Acceleration Toward Top
Ground Isolation

0.08	oz 2.3		grams
5-44 Coaxial	5-44 Coaxial		
Integral Stud 5-40 UNC-2A	Integral Stud 5-40 UNC-2A		
300 Series S.S.	300 Series S.S.		
Ceramic	Ceramic		
Crystal Shear Mode	•	Crystal Shear Mode	
10	mV/g	1.02	mV/m/s ²
500	g	4905	m/s ²
0.8 to 10,000	Hz	0.8 to 10,000	Hz
> 45	kHz	> 45	kHz
0.004	Grms	0.04	m/s ² rms
±1	% F.S.	±1	% F.S.
5	%	5	%
0.002	g/με	0.02	m/s²/με
600	Gpeak	5886	m/s² peak
3000	3000 Gpeak		m/s² peak
-60 to +250	-60 to +250 °F -51 to 121		°C
Hermetic	•	Hermetic	
2 to 20	mA	2 to 20	mA
+18 to +30	Volts	+18 to +30	Volts
100	Ω 100		Ω
+11 to +13	VDC +11 to +13		VDC
0.5 to 2.0	Sec 0.5 to 2.0		Sec
Positive		Positive	
Case Ground	•	Case Ground	

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

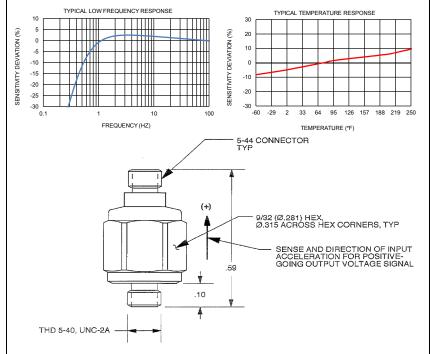
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measure 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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3145A1 for more information.

