

Model Number
3143D1T

PERFORMANCE SPECIFICATIONS

DOC NO
PS3143D1T

IEPE ACCELEROMETER

REV B, ECN 10116, 07/02/13



- HERMETICALLY SEALED
- EXCELLENT LINEARITY

		ENGLISH		SI	
PHYSICAL					
Weight		0.53	oz	15	grams
Connector [1]	Туре	4 - PIN		4 - PIN	
Mounting Provision	Thru Hole	6-32 MOUNTING SCREW		6-32 MOUNTING SCREW	
Material, Housing/Connector		TITANIUM		TITANIUM	
Sensing Element		CERAMIC		CERAMIC	1
Element Style		PLANAR SHEAR		PLANAR SHEAR	
PERFORMANCE					
Sensitivity, ±5% [2]		100	mV/G	10	mV/m/s ²
Range for ± 5 Volts Output		50	G peak	491	m/s ²
Frequency Response, ±5%		0.4 to 3000	Hz	0.4 to 3000	Hz
Resonant Frequency		> 25	kHz	> 25	kHz
Broad Band Resolution		0.0007	G rms	0.007	m/s ² rms
Linearity [3]		± 1	% F.S.	± 1	% F.S.
Maximum Transverse sensitivity		5	%	5	%
Strain Sensitivity @ 250με		0.012	G/με	0.12	m/s²/με
ENVIRONMENTAL					
Maximum Vibration		600	G peak	5886	m/s ² peal
Maximum Shock		1500	G peak	14715	m/s ⁻ peal
Operating Temperature Range		-60 to 185	°F	-51 to 85	°C
Survival Temperature Range		-100 to 225	°F	-73 to 107	°C
Seal		HERMETIC		HERMETIC	
ELECTRICAL					
Supply Current Range [4]		2 to 20	mA	2 to 20	T mA
Compliance Voltage Range		+18 to +30	Volts	+18 to +30	Volts
Output Impedence, Typ		100	Ω	100	Ω
Bias Voltage		+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant		1 to 2	Sec	1 to 2	Sec
Electrical Isolation		10	GΩ.min	10	GΩ.min

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

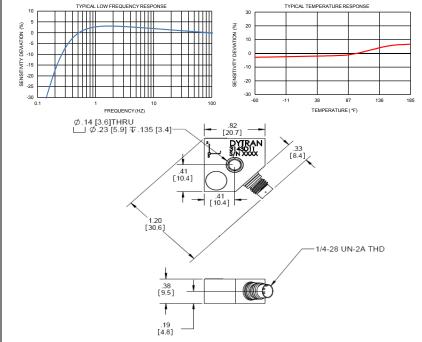
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw Model 6247A2

Notes:

- [1] Radially Mounted, 4-pin connector. Mates with Dytran cable Model 6811A
- [2] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [5] 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 127-3143D1T for more information.

