

Model Number 3133D19T PERFORMANCE SPECIFICATION DOC NO PS3133D19T

Accelerometer, Triaxial, IEPE

REV D, ECN 17013, 03/22/23



- ULTRA MINIATURE SIZE
- IDEAL LOW FREQUENCY RESPONSE
- LOW BASE STRAIN SENSITIVITY
- TEDS FEATURE
- GROUND ISOLATION
- LOW OUTGASSING

		ENGLISH		SI	
PHYSICAL					
Weight		0.05	oz	1.3	grams
Mounting		Adhesive		Adhesive	
Integral Cable	Length	3	ft	914	mm
Connector	Type	4-pin		4-pin	
Housing	Material	Titanium		Titanium	
Isolation Cup	Material	Anodized Al		Anodized Al	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	
PERFORMANCE					
Sensitivity [1], [2], ± 25%		10	mV/g	1.0	mV/m/s ²
Acceleration Range		500	g pk	4905	m/s² pk
Frequency Range, ±5%		0.3 to 6000	Hz	0.3 to 6000	Hz
Frequency Range, ±10%		0.25 to 10000	Hz	0.25 to 10000	Hz
Linearity [4]		± 1	% F.S.	± 1	% F.S.
Resonance Frequency		>27	kHz	>27	kHz
Transverse Sensitivity		6	%	6	%
Output Impedance		100	Ω	100	Ω
Noise floor, Max.		0.02	g RMS	0.20	m/s ² RMS
ENVIRONMENTAL					
Maximum Shock		3,000	g pk	29430	m/s² pk
Operating Temperature		-67 to +320	°F	-55 to 160	°C
TEDS Operating Temperature		-40 to +185	°F	-40 to +85	°C
Magnetic Sensitivity at 100 Gauss		0.0002	g/Gauss	0.002	m/s²/Gauss
Base Strain Sensitivity		0.001	g/με	0.01	m/s²/με
ELECTRICAL					
Compliance Voltage		+19 to +30	VDC	+19 to +30	VDC
Current Range [3]		2 to 20	mA	2 to 20	mA
Case Isolation, Min.		10	GΩ	10	GΩ
Bias Voltage		+7 to +14	VDC	+7 to +14	VDC
Discharge Time Constant		1.1 to 2.5	Sec	1.1 to 2.5	Sec
Output Impedance		100	Ω	100	Ω
TEDS Feature		IEEE 1451.4		IEEE 1451.4	
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Model	Sensitivity (mV/g)	Range (g pk)	Resolution (g RMS)	Oper. Temp (°F)	TC
3133D15T	0.25	20,000	0.5	-67 to 320	0.5 to 4.0
3133D16T	0.7	5,000	0.3	-67 to 320	0.5 to 2.5
3133D17T	2	2,500	0.15	-67 to 320	0.3 to 2.5
3133D18T	5	1,000	0.06	-67 to 320	1.1 to 2.5

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

Supplied Accessories:

- 1) Model 6298 small petro wax
- 2) Model 6981 removal tool
- 3) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured at 100 Hz, 10 g RMS.
- [2] Actual sensitivity is given on a calibration certificate.
- [3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier.
- [4] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [5] All specifications are at room temperature unless otherwise specified.
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.

It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



