

PERFORMANCE SPECIFICATION

DOC NO PS3133D15T

TYPICAL TEMPERATURE RESPONSE



Model Number

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

		ENGI	LISH		SI	
PHYSICAL			-			
Weight		0.05	oz	1.3	grams	
Mounting		Adhesive		Adhesive		
Integral Cable	Length	3	ft	914	mm	
Connector	Туре	4-pin		4-pin		
Housing	Material	Titanium		Titanium		
Isolation Cup	Material	Anodized Al		Anodized Al		
Sensing Element	Material	Quartz		Quartz		
	Mode	Shear		Shear		
PERFORMANCE						
Sensitivity [1], [2], ± 25%		0.25	mV/g	0.025	mV/m/s ²	
Acceleration Range		20,000	Gpeak	196200	m/s² peak	
Frequency Range, ±5%		0.7 to 6000	Hz	0.7 to 6000	Hz	
Frequency Range, ±10%		0.7 to 10000	Hz	0.7 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.		0.50	Grms	4.91	m/s ² rms	
ENVIRONMENTAL						
Maximum Shock		25,000	Gpeak	245250	m/s ²	
Maximum Vibration		22,000	Gpeak	215820	m/s ²	
Operating Temperature		-67 to +320	°F	-55 to 160	°C	
TEDS Operating Temperatur	re	-40 to +185	°F	-40 to +85	°C	
Seal		Hermetic		Hermetic		
Magnetic Sensitivity at 100 0	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		+18 to +30	VDC	+18 to +30	VDC	
Current Range [4]		2 to 20	mA	2 to 20	mA	
Case Isolation, Min.		10	GΩ	10	GΩ	
Bias Voltage		+7 to +10	VDC	+7 to +10	VDC	
Discharge Time Constant		0.5 to 4.0	seconds	0.5 to 4.0	seconds	
Output Impedance		100	Ω	100	Ω	
TEDS Feature		IEEE 1451.4		IEEE 1451.4		

	Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
	3133D16T	0.7	5000	0.30	-67 to 320	0.5 to 2.5
	3133D17T	2	2500	0.15	-67 to 320	0.3 to 2.5
	3133D18T	5	1000	0.06	-67 to 320	1.1 to 2.5
	3133D19T	10	500	0.02	-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 6741 removal tool
- 3) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured at 100 Hz, 10 Grms
- [2] Actual sensitivity is given on a calibration certificate

TYPICAL LOW FREQUENCY RESPONSE

- [3] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier
- [5] In the interest of constant product improvement, we reserve the rights to change the 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 overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.





