

# 3583BT

MODEL

# PERFORMANCE SPECIFICATIONS

DOC NO. **PS3583BT** 

Accelerometer, Triaxial, IEPE

REV A, ECN 12577, 03/29/16



	This family als	<u>o includes:</u>				
HIGH SENSITIVITY	Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp (°F)	TC(sec.)
• LOW NOISE						
• TEDS FEATURE						

PHYSICAL Weight, Max.

Connector [1] Type Material

Housing Material Isolation

Sensing Element Material

Mode

10000Hz

ENGLI	SH	S	il .
	-		
0.95	oz	27	grams
4-pin, 1/4-28		4-pin, 1/4-28	
Titanium Alloy		Titanium Alloy	

Aluminum, Anodized Aluminum, Anodized Base Isolated Base Isolated Ceramic Ceramic Shear Shear

# PERFORMANCE Sensitivity, ±10% [2]

Acceleration Range, ± Frequency Range, ±10% Resonance Frequency Linearity [3] Transverse Sensitivity Max Noise floor Spectral Noise 1Hz 10Hz 100Hz 1000Hz

10 0.25 to 4000 >15 1 6 0.0002 30 7 9 1	500
>15 1 6 0.0002 30 7	10
1 6 0.0002 30 7	0.25 to 4000
0.0002 30 7	>15
0.0002 30 7	1
30 7	6
7	0.0002
	30
9	7
1	9
1	1
l	1

mV/g	51
Gpeak	98.1
Hz	0.25 to 4
kHz	>15
%F.S.	1
%	6
Grms	0.00
Grms/sqr(Hz)	294.
Grms/sqr(Hz)	68.6
Grms/sqr(Hz)	88.2
Grms/sqr(Hz)	9.81
Grms/sqr(Hz)	9.81

mΑ

**VDC** Ω

VDC

sec

i1	mV/m/s <sup>2</sup>		
3.1	m/s² peak		
o 4000	Hz		
15	kHz		
1	%F.S.		
6	%		
002	m/s <sup>2</sup> rms		
4.3	µm/s <sup>2</sup> rms/sqr(Hz)		
.67	µm/s <sup>2</sup> rms/sqr(Hz)		
.29	µm/s <sup>2</sup> rms/sqr(Hz)		
81	µm/s <sup>2</sup> rms/sqr(Hz)		
81	µm/s² rms/sqr(Hz)		
	•		

mΑ

VDC

Ω

VDC

sec

## **ELECTRICAL**

Supply Current Range [4]
Compliance Voltage Range
Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant
TEDS Feature

ENV	IRON	MEN.	TAL

Shock Max Vibration Max Operating Temperature Seal Magnetic Sensitivity at 100 Gauss Base Strain Sensitivity, Max

2 to 20		
+18 to +30		
100		
11 to 13		
1.0 to 2.0		
IEEE 1451.4		

1000	Gpeak
50	Gpeak
-60 to +185	°F
Ероху	
0.00009	g/Gauss
0.002	a/us

2 to 20
+18 to +30
100
11 to 13
1.0 to 2.0
IEEE 1451.4

	_
9810	m/s <sup>2</sup>
491	m/s <sup>2</sup>
-51 to +85	°C
Epoxy	
0.0008829	m/s²/Gauss
0.01962	m/s²/με

Sun	nlied	Access	ories:

- 1) Accredited Calibration Certificate (ISO 17025)
- 2) Mounting stud, model 6200 (10-32 to 10-32)

### Notes:

[1] Mates with Dytran cable Model 6811AXX or 6824AXX (XX denotes length in feet)

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

- [2] Measured at 100 Hz, 1 Grms per ISA RP 37.2
- [3] Measured 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 amplifier
- [5] In the interest of constant product improvement, Dytran reserves the rights to change specifications without notice.



