

# Miniature underwater accelerometer

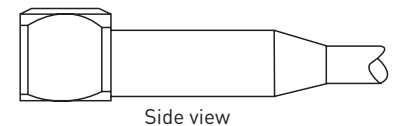
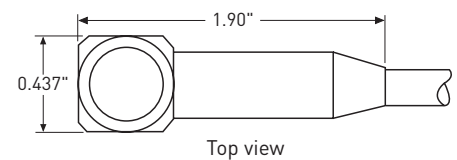
## 754

### SPECIFICATIONS

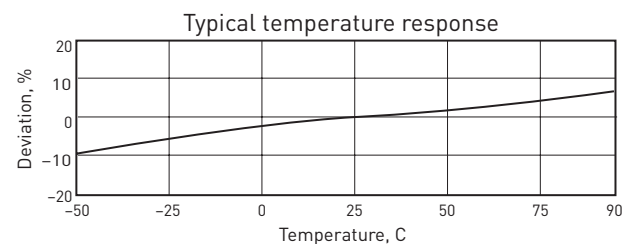
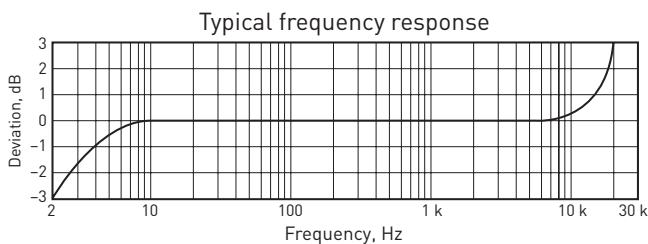
<b>Sensitivity, <math>\pm 1.5</math> dB, 25°C</b>		10 mV/g
<b>Acceleration range<sup>1</sup></b>		250 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	<b><math>\pm 1</math> dB</b>	10 - 15,000 Hz
	<b><math>\pm 3</math> dB</b>	2 - 25,000 Hz
<b>Resonance frequency, mounted, nominal</b>		60 kHz
<b>Transverse sensitivity, max</b>		10% of axial
<b>Temperature response</b>		see graph below
<b>Power requirement:</b>		
<b>Voltage source</b>		18 - 30 VDC
<b>Current regulating diode<sup>1</sup></b>		2 - 5 mA
<b>Electrical noise, equiv. g, nominal:</b>		
<b>Broadband</b>	<b>2.5 Hz to 25 kHz</b>	300 $\mu$ g
<b>Spectral</b>	<b>10 Hz</b>	50 $\mu$ g/ $\sqrt$ Hz
	<b>100 Hz</b>	4.0 $\mu$ g/ $\sqrt$ Hz
	<b>1,000 Hz</b>	1.5 $\mu$ g/ $\sqrt$ Hz
	<b>10,000 Hz</b>	1.0 $\mu$ g/ $\sqrt$ Hz
<b>Output impedance, max</b>		200 $\Omega$
<b>Bias output voltage, nominal</b>		8, $\pm 1.5$ VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Hydrostatic pressure, max</b>		650 psi
<b>Temperature range</b>		-20° to +90°C
<b>Vibration limit</b>		500 g peak
<b>Shock limit</b>		5,000 g peak
<b>Base strain sensitivity</b>		0.01 g/ $\mu$ strain
<b>Dynamic weight</b>		4 grams
<b>Case material</b>		titanium
<b>Mounting</b>		adhesive
<b>Integral cabling</b>		J6, 10 ft.

### Key features

- High pressure rating
- Manufactured in ISO 9001 facility



**Notes:** <sup>1</sup> To minimize the possibility of signal distortion when driving long cables with high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables.



Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.