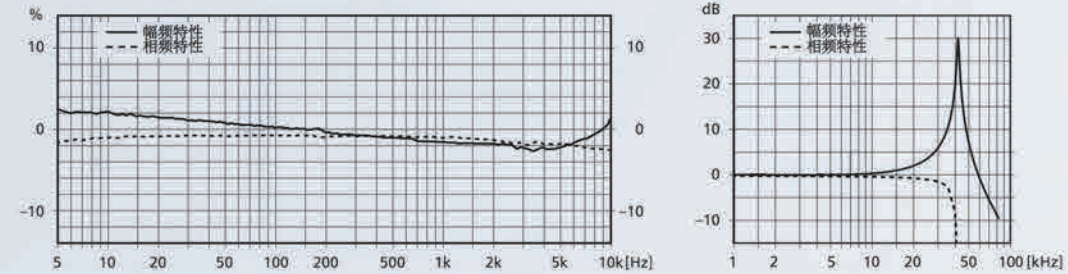


# Piezoelectric Voltage output type (IEPE) accelerometer

General tri-axial accelerometer Model: U318E Version: U318Ev221EN

PERFORMANCE	ENGLISH	SI
sensitivity ( $\pm 10\%$ )	10mV/g	1.02 mV/(m/s <sup>2</sup> )
measuring range	$\pm 500$ g pk	$\pm 4,900$ m/s <sup>2</sup> pk
frequency range( $\pm 5\%$ ) [2]	1~4k Hz	1~4k Hz
frequency range( $\pm 10\%$ ) [2]	0.5~6k HZ	0.5~6k HZ
resonance frequency [1]	>20K	>20K
non-linearity [3]	$\leq 1\%$	$\leq 1\%$
tansverse sensitivity	$\leq 5\%$	$\leq 5\%$
resolution ratio	0.001 g rms	0.01 m/s <sup>2</sup> rms
<b>Environmental character</b>		
overload limit	$\pm 2000$ g pk	$\pm 1,9600$ m/s <sup>2</sup> pk
temperature range	-58~+248° F	-50~+120°C
<b>Electrical character</b>		
excitation voltage [4]	+18~+30 VDC	+18~+30 VDC
excitation current [5]	2~20 mA	2~20 mA
bias voltage [1]	8-12V	8-12V
electrical isolation	-	-
output polarity [1]	positive	positive
<b>physical character</b>		
sensing geometry	ceramic	ceramic
stucture mode	shear	shear
housing material	titanium	titanium
sealing mode	laser welding	laser welding
dimension	0.70 in $\times$ 0.70 in $\times$ 0.5 in	18mm $\times$ 18mm $\times$ 12.7mm
weight [1]	0.67 oz	19g
electrical connector	3-10-32	3-10-32
electrical connection location	-	-
mounting	$\Phi 4.1$ mm through hole	$\Phi 4.1$ mm through hole

## TYPICAL FREQUENCY RESPONSE:



## NOTE:

- [1] Inherent characteristics
- [2] The low frequency response is determined by the external signal conditioner
- [3] least square method
- [4] two-wire constant current incentive source power supply, recommended 24V.
- [5] excitation current recommended 4mA.

## DRAWING:

