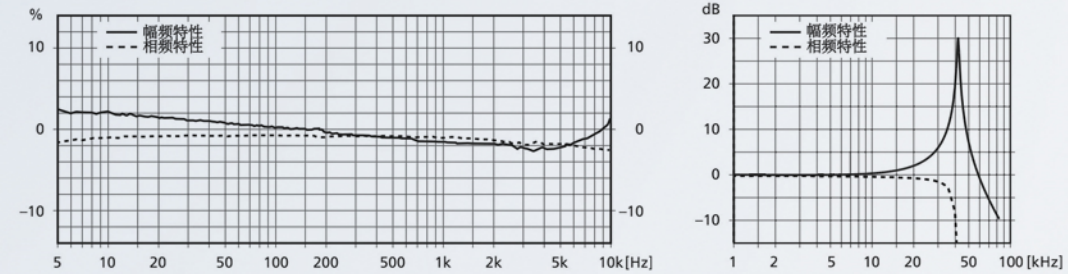


# Piezoelectric Charge output type (PE) accelerometer

Shock mono-axial accelerometer Model: S117C.1 Version: H1R10Kv221SI

PERFORMANCE	ENGLISH	SI
sensitivity ( $\pm 10\%$ )	0.30 pC/g	0.03 pC/(m/s <sup>2</sup> )
measuring range	$\pm 10,000$ g pk	$\pm 98,000$ m/s <sup>2</sup> pk
frequency response ( $\pm 5\%$ ) [2]	10k Hz	10k Hz
frequency response ( $\pm 10\%$ ) [2]	12k HZ	12k HZ
resonance frequency [1]	>25K	>25K
Nonlinear [3]	$\leq 1\%$	$\leq 1\%$
lateral sensitivity	$\leq 5\%$	$\leq 5\%$
<b>Environmental character</b>		
overload limit	$\pm 15,000$ g pk	$\pm 147,000$ m/s <sup>2</sup> pk
temperature range	-40~+185° F	-40~+85°C
<b>Electrical character</b>		
capacitance [4]	110 pF	110 pF
insulation resistance	$\geq 1 \times 10^{11} \Omega$	$\geq 1 \times 10^{11} \Omega$
output polarity [1]	isolation	isolation
electrical isolation	positive	positive
<b>physical character</b>		
sensing element	ceramic	ceramic
structure mode	shear	shear
shell material	titanium	titanium
sealing mode	laser welding	laser welding
dimensions	$\Phi 0.49$ in $\times$ 0.99 in	$\Phi 12.5$ mm $\times$ 25.5 mm
weight [1]	0.35 oz	10 g
electrical connector	integral cable	integral cable
electrical connection location	top	top
mounting thread	M6 $\times$ 0.75 bolt	M6 $\times$ 0.75 bolt

## TYPICAL FREQUENCY RESPONSE:



## NOTE:

- [1] Inherent characteristics
- [2] The low frequency response is determined by the external signal conditioner
- [3] least square method
- [4] It depends on the material and quantity of sensing elements

## DRAWING:

