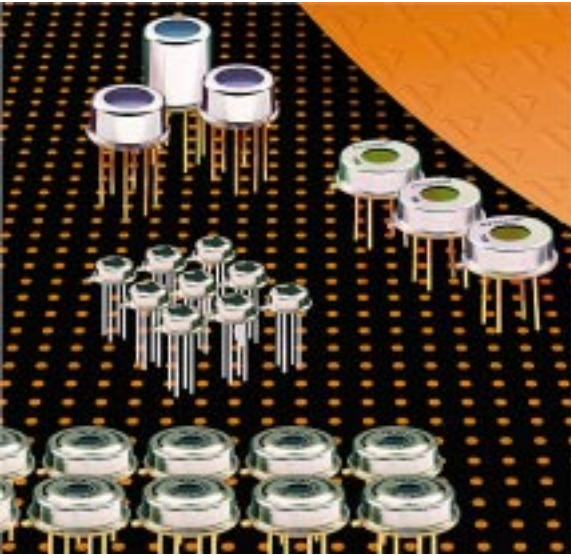


Thermopile Infrared Detectors

Thermopile Detector TPS 333



Miniature sensor housing: TO 18

Thermistor temperature reference included

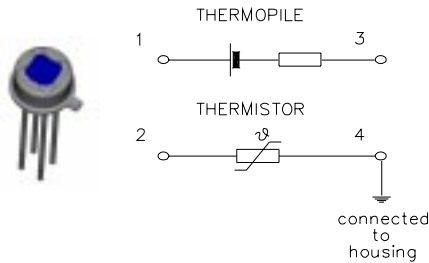
Large signal; low temperature coefficient of sensitivity

Ideally suited for ear thermometers, miniature pyrometers

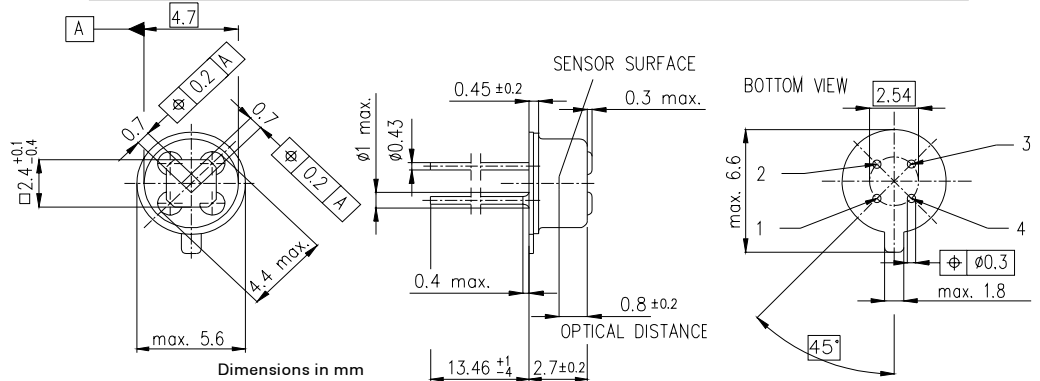
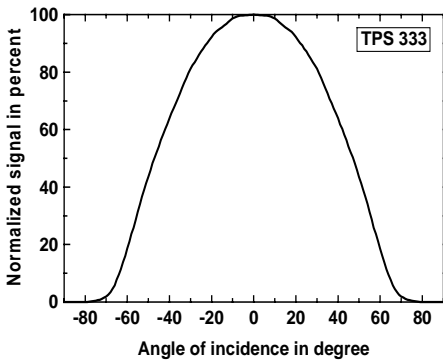
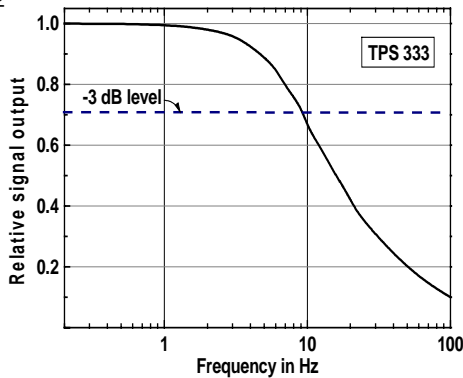
The **TPS 333** is an extremely small thermopile detector employing a chip of 0.7 x 0.7 mm² absorber size and a 100 kΩ thermistor as temperature reference.

The square window opening is equipped with a 5.5 μm longpass (standard) infrared filter. The detector shows a constant sensitivity characteristics over the wavelength.

Right for modification reserved / WS 1, 19.12.2001



Parameters	TPS 333		
	typical	units	condition
Sensitive area	0.7 x 0.7	mm ²	absorbing area
Window size	2.4 x 2.4	mm ²	
DC sensitivity	35	V/W	500K BB 5...14μm
Resistance	75	kΩ	
Noise	38	nV/√Hz	r.m.s. 300K,
NEP	1.2	nW/√Hz	500K BB 5...14μm
D*	0.6 x 10 ⁸	cm/√Hz/W	500K BB 5...14μm
TC of sensitivity	0.02	%/K	
TC of resistance	0.02	%/K	
Time constant	25	ms	
Storage temperature	-40	100	°C non permanent
Operating temperature	-40	100	°C non permanent
Thermistor resistance	100	kΩ	25°C
beta	3964	K	25°C/100°C
Field of view	100	°	at 50% points



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