

## DATA SHEET

Part Number : PKGS-00GXP1-R

## 1. Scope

This data sheet is applied to surface mountable acceleration sensor.

## 2. Part Number

Murata Part Number : PKGS-00GXP1-R

## 3. Dimensions

- 3-1 Appearance : As per paragraph 10.Appearance criteria.  
 3-2 Dimensions : See Figure 2.  
 3-3 Construction : A piezo ceramic element is stuck between two ceramic substrate.

## 4. Characteristics

(\* Temperature 25±3°C, unless otherwise noted.)

	Parameter	Test Conditions	Min.	Typ.	Max.	Units	Note	
4-1	Charge Sensitivity	1kHz, 98.1m/s <sup>2</sup> (10G) applied in the direction of D axis at Fig.1	-15%	35.7 (0.350)	+15%	fC/(m/s <sup>2</sup> ) (pC/G)	1, 2, 4	
4-2	Insulation Resistance : Ri	10V DC, after 1 min.	500	10000		MΩ		
4-3	Non-Linearity	% of the Full-Scale output at 490m/s <sup>2</sup> (50G). Range : ±50G		1%	5%			
4-4	Resonance Frequency		26	31	36	kHz	3	
4-5	Inclined Angle of Sensitivity Axis		-3	0	3	Degree		
4-6	Temperature Drift of Charge Sensitivity	Maximum deviation from initial value at +25°C.	70°C	-0.5%	3.0%	6.5%		
			0°C	-4.0%	-2.0%	0.5%		
4-7	Capacitance : Co	1Vrms, 1kHz	-30%	390	+30%	pF		

## Note:

- As measured with an applied acceleration in the direction of D at figure 1. In this case, positive voltage and electrical charge are generated at electrode B.
- 1G = 9.80665m/s<sup>2</sup>
- Resonance frequency of inner bimorph element.
- f = 10<sup>-15</sup>

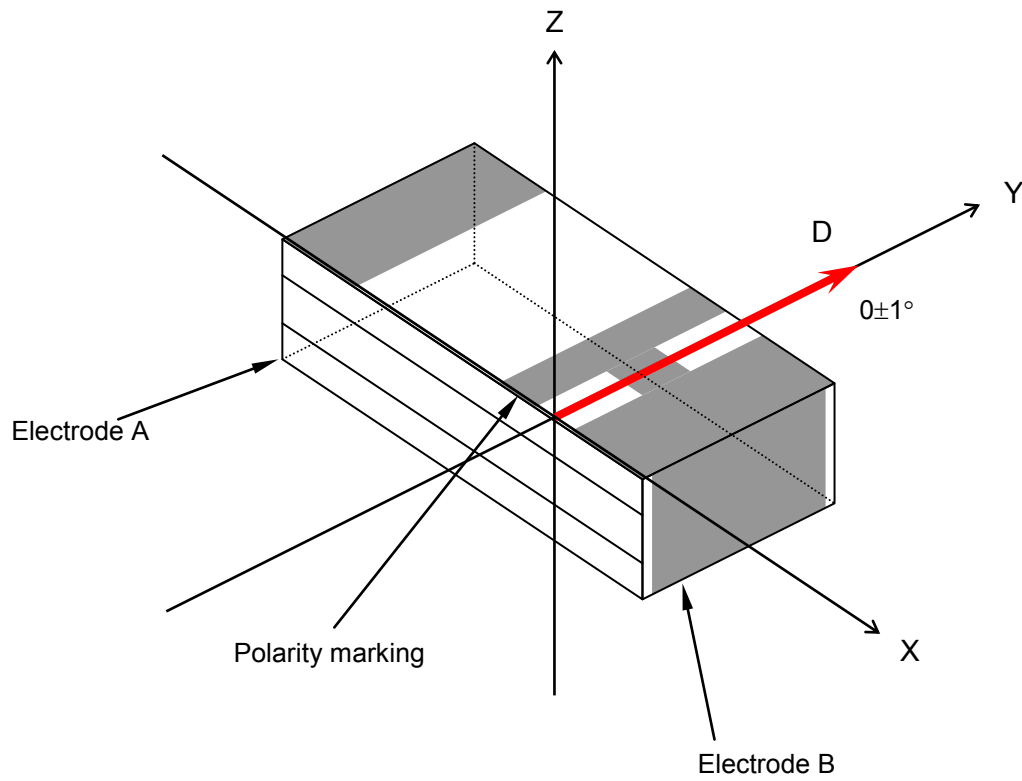
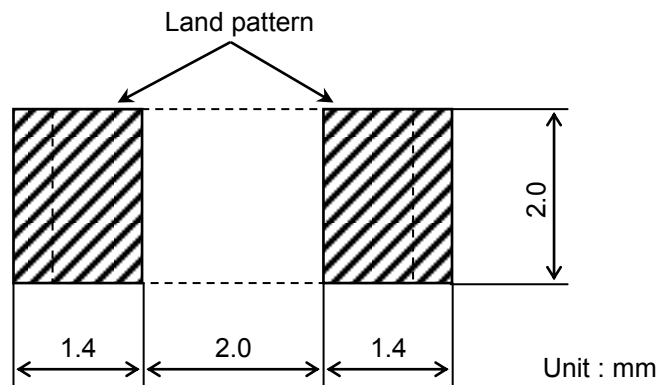


Figure 1.

Axis D : This axis is an acceleration applied direction, when electric charge sensitivity is checked.

#### 5. Standard land pattern



#### 6. Absolute Rating

Apply voltage between electrode A and B : 10 Vp-p within 60 sec. max.  
 Storage temperature range : -40 to 85 °C  
 Operating temperature range : -40 to 85 °C