



Gages for Ultra-small Strain Measurement KSP & KSN

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks
		Grid		Base		
		Length	Width	Length	Width	

●KSP Series Semiconductor Strain Gages

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. 120

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. 120

Uniaxial 350Ω gage

Resistance: 350 Ω

Gage factor: Approx. 120

Uniaxial 350Ω gage

Resistance: 350 Ω

Gage factor: Approx. 150

Uniaxial 1000Ω gage

Resistance: 1000 Ω

Gage factor: Approx. 160

Uniaxial, 2-element

Resistance: 120 Ω

Gage factor: Approx. 225

The KSP series gages are stable-performance semiconductor strain gages usable for general stress measurement and transducers. The F2 type has a half-bridge formed with 2-element, positive and negative, for self-temperature compensation and is suitable for strain measurement of steel products.

Applicable Adhesives and Operating Temperature Range after Curing
CC-33A: -50 to 120°C CC-36: -30 to 100°C

KSP-2-120-E3	2	0.25	5	3	
--------------	---	------	---	---	--

KSP-2-120-E4	2	0.26	7.7	4	
--------------	---	------	-----	---	--

Uniaxial 350Ω gage

Resistance: 350 Ω

Gage factor: Approx. 120

KSP-6-350-E4	6	0.27	13	5	
--------------	---	------	----	---	--

Uniaxial 350Ω gage

Resistance: 350 Ω

Gage factor: Approx. 150

KSP-1-350-E4	1	0.25	6.6	4	
--------------	---	------	-----	---	--

Uniaxial 1000Ω gage

Resistance: 1000 Ω

Gage factor: Approx. 160

KSP-2-1K-E4	2	0.25	7.7	4	
-------------	---	------	-----	---	--

Uniaxial, 2-element

Resistance: 120 Ω

Gage factor: Approx. 225

KSP-3-120-F2-11	3	n0.83 p0.47	10	4	A min. qty 2 PC.
-----------------	---	----------------	----	---	------------------

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks
		Grid		Base		
		Length	Width	Length	Width	

●KSN Series Self-temperature-compensation Semiconductor Strain Gages

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. -100

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. -100

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. -110

The KSN series gages use an n-type silicon for the resistive element to control the resistance temperature coefficient of the material according to the linear expansion coefficient of the measuring object. Thus, thermally-induced resistance change is minimized.

Applicable Adhesives and Operating Temperature Range after Curing
CC-33A: -50 to 120°C CC-36: -30 to 100°C

KSN-2-120-E3-11	2	0.3	5	3	
KSN-2-120-E3-16					

KSN-2-120-E4-11	2	0.3	7.7	4	A min. qty 4 PC.
KSN-2-120-E4-16					

Uniaxial

Resistance: 120 Ω

Gage factor: Approx. -110

KSN-2-120-E5-11	2	0.3	—		Oxygen-free tin-plated copper wires 40 mm long each
KSN-2-120-E5-16					

Biaxial, 0°/90°

Resistance: 120 Ω

Gage factor: Approx. -100

KSN-2-120-F3-11	2	0.3	φ11		A min. qty 2 PC.
KSN-2-120-F3-16					

Uniaxial 350Ω gages

Resistance: 350 Ω

Gage factor: Approx. -100

KSN-6-350-E4-11	6	0.31	13	5	
KSN-6-350-E4-16					

A min. qty 4 PC.