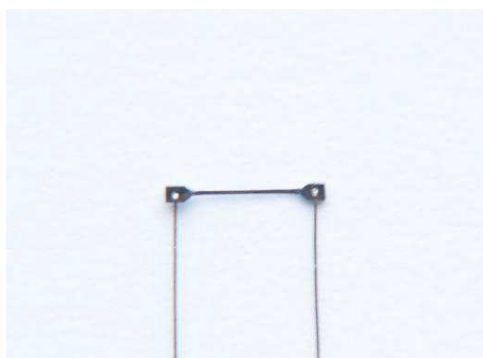
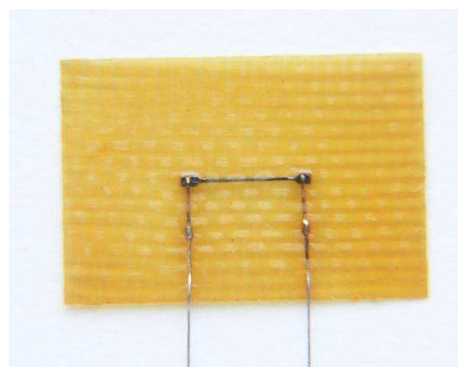


Semiconductor strain gauges



without support



with support

At present, we have these types of strain gauges store: Type „Positive“, length 3mm and 6mm, with gauge factor $C_1 = 120 - 150$ and with electrical resistance 120 , 350 and 1000 Ohm. Of course, we are able to produce strain gauges with parameters according to customer's requirements.

We deliver semiconductor strain gauges in two sorts of tolerance at pack, specified by assurance of their tolerance characteristics. For dynamic measurement and stable temperatures are suitable strain gauges marked as **N-sort**. For static measurements, sensors and strain gauges for temperature fluctuation are suitable ones marked as **T-sort**.

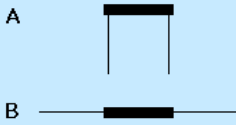
		Tolerance at pack (standard is 5 pieces)		Tolerance of type	
		N-sort	T-sort	N-sort	T-sort
R_0 – Electrical resistance of the free gauge		$\pm 0.4\%$	$\pm 0.25\%$	$\pm 5\%$	$\pm 3\%$
R_B - Electrical resistance of the free gauge with support		$\pm 1\%$	$\pm 0.50\%$	$\pm 10\%$	$\pm 5\%$
Strain sensitivity constants	C_1 (Gauge factor)	$\pm 2\%$	$\pm 2\%$	$\pm 5\%$	$\pm 5\%$
	C_2	$\pm 8\%$	$\pm 8\%$	*	*
α - Temperature resistance coefficient of the free gauge		-----	$\pm 0.02\%/^{\circ}\text{C}$	-----	*
Limit static positive tensile strain		0.3%	0.3%	0.3%	0.3%

* according to contract

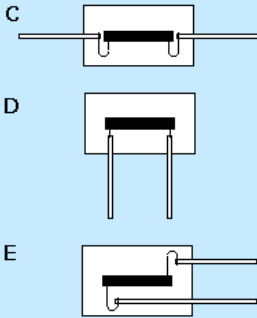
Strain gauge code designation:

AP120-6-12-G/xx/xx

without support:



with support:



Patterns

Gauge factor polarity:

P - positiv

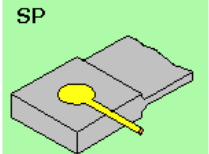
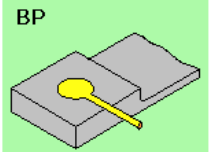
N - negativ

120 - Gauge factor value

6 - Length of the silicon element [mm]

12 - Resistance in tens of ohms

Shape of the end of the silicon strain gauge



Material of wire:

Au - gold

Cu - cooper

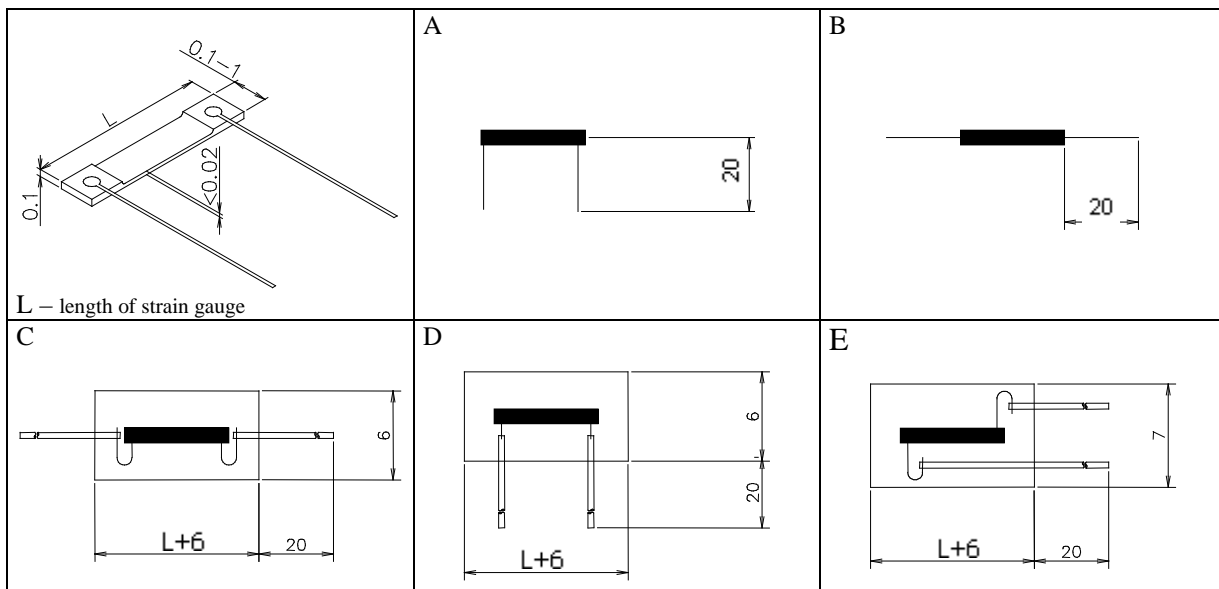
CuSn - cooper tin

CuAu - cooper gold

Support:



G - fiber-glass

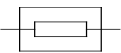

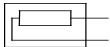
Dimensions of strain gauge



The range of semiconductor strain gauges

*** In stock** (August 2010)

Implementation	Type	Nominal resistance [Ohm]	K-factor	Length of strain gauge L [mm]
	AP95-3-3	30	+95	3
	AP105-5-3	30	+105	5
	AP120-1.5-12	120	+120	1.5
	AP120-3-12	120	+120	3
	AP120-6-12	120	+120	6
	AP120-6-25	250	+120	6
	AP120-10-12	120	+120	10
	AP120-10-35	350	+120	10
	AP125-2-12	120	+120	2
	AP130-1.5-12	120	+130	1.5
	AP130-3-12	120	+130	3
	AP130-6-12	120	+130	6
	AP130-6-35	350	+130	6
	AP130-10-60	600	+130	10
	AP130-20-35	350	+130	20
	AP140-2-12	120	+140	2
	AP140-3-35	350	+140	3
	AP140-6-35	350	+140	6
	AP140-10-100	1000	+140	10
	AP150-1.5-35	350	+150	1.5
	AP150-2-12	120	+150	2
	AP150-3-55	550	+150	3
	AP150-3-100	1000	+145	3
	AP150-6-35	350	+150	6
	AP160-1.5-35	350	+160	1.5
	AP160-6-100	1000	+160	6
	AP160-10-170	1700	+160	10
	AN20-6-65	650	-20	6
	AN120-3-12	120	-120	3
	AN120-3-35	350	-120	3
	AN120-6-30	300	-120	6
	BP120-3-12	120	+120	3
	BP120-6-12	120	+120	6
	BP120-10-35	350	+120	10
	BP130-1.5-12	120	+130	1.5
	BP130-3-12	120	+130	3
	BP130-6-35	350	+130	6
	BP130-10-60	600	+130	10
	BP140-3-35	350	+140	3
	BP140-10-100	1000	+140	10
	BP150-1.5-35	350	+150	1.5
	BP150-3-100	1000	+150	3
	BP150-6-100	1000	+150	6

Implementation	Type	Nominal resistance [Ohm]	K-factor	Length of strain gauge L [mm]
	CP120-3-12-G	120	+120	3
	CP120-6-12-G	120	+120	6
	CP120-10-35-G	350	+120	10
	CP130-1.5-12-G	120	+130	1.5
	CP130-3-12-G	120	+130	3
	CP130-6-35-G	350	+130	6
	CP130-10-60-G	600	+130	10
	CP140-3-35-G	350	+140	3
	CP140-10-100-G	1000	+140	10
	CP150-1.5-35-G	350	+150	1.5
	CP150-3-100-G	1000	+150	3
CP150-6-100-G	1000	+150	6	
	DP120-3-12-G	120	+120	3
	DP120-6-12-G	120	+120	6
	DP120-10-35-G	350	+120	10
	DP130-1.5-12-G	120	+130	1.5
	DP130-3-12-G	120	+130	3
	DP130-6-35-G	350	+130	6
	DP130-10-60-G	600	+130	10
	DP140-3-35-G	350	+140	3
	DP140-10-100-G	1000	+140	10
	DP150-1.5-35-G	350	+150	1.5
	DP150-3-100-G	1000	+150	3
DP150-6-100-G	1000	+150	6	
	EP120-3-12-G	120	+120	3
	EP120-6-12-G	120	+120	6
	EP120-10-35-G	350	+120	10
	EP130-1.5-12-G	120	+130	1.5
	EP130-3-12-G	120	+130	3
	EP130-6-35-G	350	+130	6
	EP130-10-60-G	600	+130	10
	EP140-3-35-G	350	+140	3
	EP140-6-35-G	350	+140	6
	EP140-10-100-G	1000	+140	10
	EP150-1.5-35-G	350	+150	1.5
	EP150-3-100-G	1000	+150	3
EP150-6-100-G	1000	+150	6	
EP160-3-100-G	1000	+160	3	