Strain gauge N5K-13-S5033R-10C/DG/E5

Item number: 11939



Ultra-miniature strain gauge is applicable for the construction of load pins and shear force sensors. The complementary type with -45° orientation is S5276. The backing material of this strain gauge is a polyimide with about 20µm thickness. The Karma measuring grid (3 µm) is covered with polyimide film, also with a thickness of approx. 20µm. The contact surfaces are gold-plated for easy connection of the Cu enameled wires or Teflon strands AWG44 ... AWG36. This strain gauge of the N5K series is suitable for use in the temperature range from -76 ° C to + 205 ° C.

The temperature-related drift due to expansion of the sensor body is compensated for the materials steel (variant 06) and aluminum (variant 13). 10^7 load cycles with alternating load ± 1800µm / m are achieved.

The gage factor of the sensor strain gage with Karma measuring grid is approx. 2.11 and is not individually identified, unlike for strain gauges for stress analysis.

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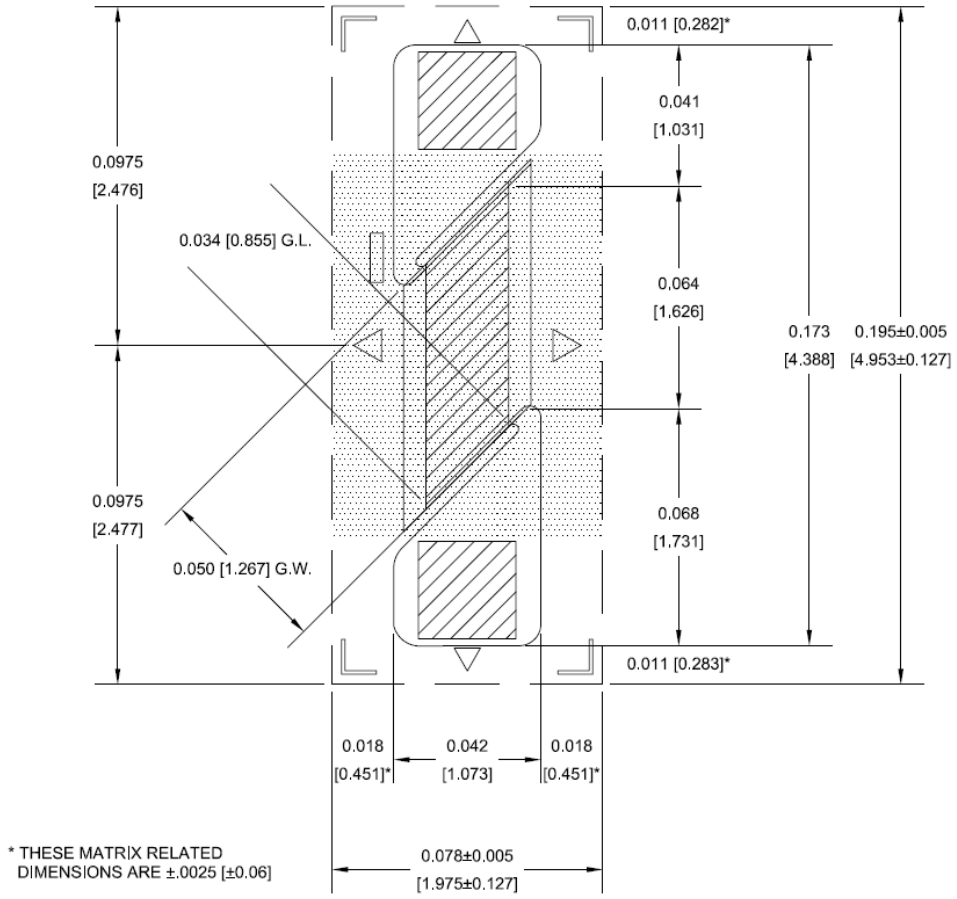
Stand: 10.03.2026

Technical Drawing



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Technical Data

Strain gauge		Einheit
Purpose of measurement	Aufnehmerbau	
Type	Metalllfolie	
Number of grids	1	
Grid width	1.27	mm
maximum width	1.97	mm
Grid length	0.85	mm
maximum length	4.95	mm
Resistance	1000	Ohm
Tolerance resistance	0,2 %	
Grid disposition	45	
Connection	Solder pad	
Substrate	Polyimid	
Temperature compensation	Aluminium-13	

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