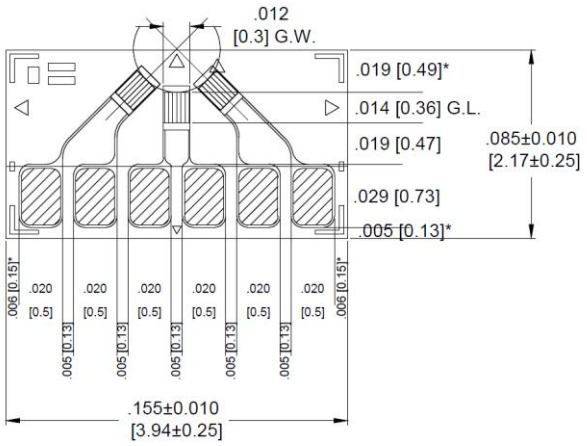
S5198 Planar Rosette Datasheet

Main properties

- High performance Planar Rosette Strain Gage with miniature grids and matrix size, for stress determination in precise locations
- High resistance grid values for reduced self-heating when using substrates with lower heat conductivity such as PCBs
- 3 grids configuration allowing analysis of biaxial strain fields without the need for former knowledge of principal stress directions
- Pre-wired, high performance, color coded wires for easy integration directly to data acquisition systems



Item		Value
Resistance		350±0.5%
Gage Factor	(-45˚) Grid 1	1.86 Nom
	(0˚) Grid 2	1.79 Nom
	(+45˚) Grid 3	1.86 Nom
Transverse Sensitivity	(-45˚) Grid 1	1.9±0.2%
	(0˚) Grid 2	3.6±0.2%
	(+45˚) Grid 3	1.9±0.2%
Operating Temperature		-75 to 200˚C
Fatigue		More than 10^7 cycles at ±1800με
Structure	Backing	Polyimide, 20µm
	Resistive Foil	NiCr
	Encapsulation	Epoxy, 10-12µm
Thermal performance coefficients on package, per gage lot		

*Values above referenced to gage only

** GF and TS values for K93 ingot, for other ingots slight variations are possible, indicated on package

Wires

- Teflon insulated, flexible, 3 twisted wires per grid. Stripped and tinned at ends for easy integration to DAQ. Operating temperature up to 200 ˚C
- Color coding:

(-45˚) Grid 1		(0˚) Grid 2		(+45˚) grid 3	
Pad A	Pad B	Pad A	Pad B	Pad A	Pad B
Black+white wire	Red Wire	Black+white wire	Red Wire	Black+white wire	Red Wire
Red label at wire end		Green label at wire end		Blue label at wire end	

Complies to

- **IPC–JEDEC 9702** Monotonic Bend Characteristics of Board-Level Interconnects
- **IPC–JEDEC 9704** Printed Wiring Board Strain Gage Test Guideline
- **JEDEC JESD22-B111** Board Level Drop Test Method of Components for Handheld Electronic Products