



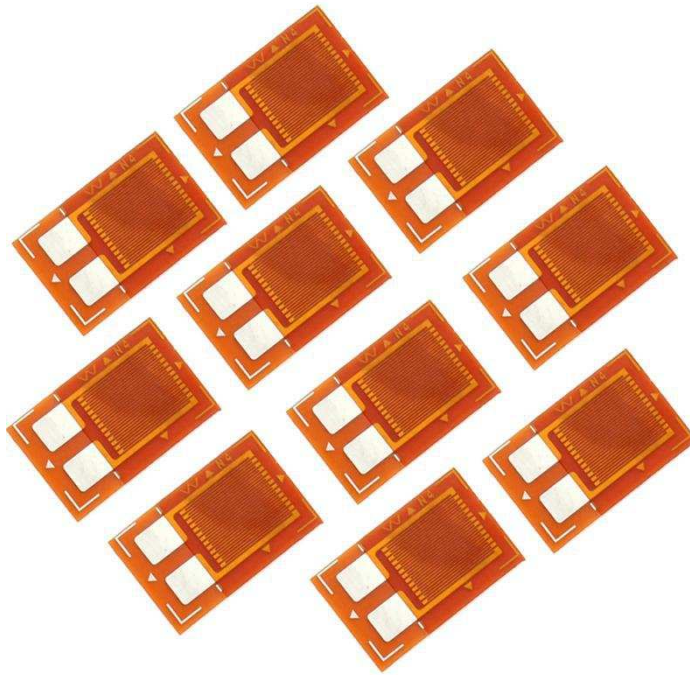
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**Foil Resistance Strain Gauge**  
**350 ohm BF350-3AA**



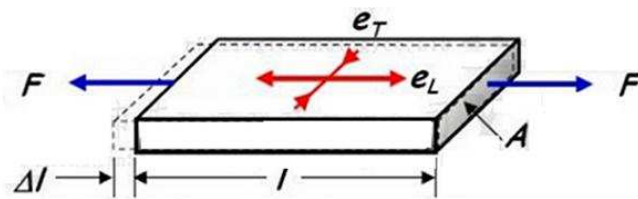
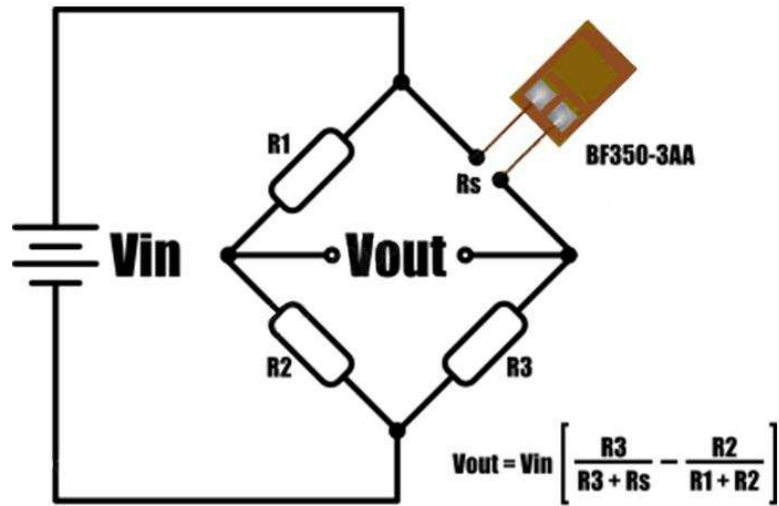
## Introduction

A resistive strain gauge sensor with a 350-ohm nominal resistance which varies when a force is applied. By measuring the change in the sensor's resistance, a measurement of the force applied to it can be obtained. The strain gauges exhibit small changes in resistance. Usually used in general metal materials and other similar elastomers.

## Parameters

Type	BF350-3 AA
Resistance	350 Ω (typ.)
The Basal Material	Epoxy-Modified Phenolic
Basal Material Thickness	32 ± 1(um)
Grid Material	Constantan
Insulation resistance	10000 Ω
Sensitivity Coefficient	2.1
Sensitivity Coefficient Dispersion	≤ ± 1%
Transverse effect coefficient	0.4%
Strain Limit	2.0%
Fatigue Lifetime	≥ 1M
Size	7.1 X 4.5mm/0.28 X 0.18inch(L*W)
Working Temperature	-30~+80°C
Temperature Compensation	Aluminium
Temperature Compensation Coefficient	9,11,16,23,27

Backing Material		Resistance in OHMs			S.T.CODE.M.C				
Kind of Strain Gage		Active Gage Length			Grid and Tab Geometry		Creep Compensation		
B	F	350	-	3	AA		23	T0	
B	Foil	F	Phenolics		AA	Homo axial	Steel	11	T5 T3 T1 T8 T6 T4 N4 N6 N8 N0 N1 N3 N5 N7 N9 → creep minus → positive
		H	Epoxy	120 175 350 500 700 1000 1500	HA	45° Indented Slice			
T	Specific use	A	Polyimide		GB	Sewmi-bridge Slice	Al	23	
		B	Reinforced Laminated Epoxy		FG	Full-bridge Slice			
					KA	Wafer Slice	Stainless Steel	16	



Material resistivity

$$R = \frac{\rho l}{A}$$

← Element length  
 ← Cross section area

$$\Delta R = \left( \frac{\partial R}{\partial l} \right) \Delta l + \left( \frac{\partial R}{\partial A} \right) \Delta A + \left( \frac{\partial R}{\partial \rho} \right) \Delta \rho$$