



STANDARD SEMICONDUCTOR STRAIN GAGES

Micron semiconductor strain gages are made from "P" doped bulk silicon. They have no P/N junction. The Silicon is etched to shape, eliminating the potential for molecular dislocation or cracks, thereby optimizing performance.

STANDARD GAGE SPECIFICATIONS	
Materials	Czochralski pulled boron doped silicon
Leads	.002 dia. Gold x 0.5 in. long. Some gages have .0015 dia. Leads.
Contact Pad	Gold nickel fused, aluminum for Hi-Temp
Lead Attachment	Parallel gap welded with epoxy reinforcement or ball bonded
Operating Strain	±2000 μ inch/inch (3000 μ inch/inch max.)
Linearity	Better than ±0.25% to 600 μ inch/inch
	Better than ±1.5% to 1500 μ inch/inch
Max. Operating Temperature	+600°F

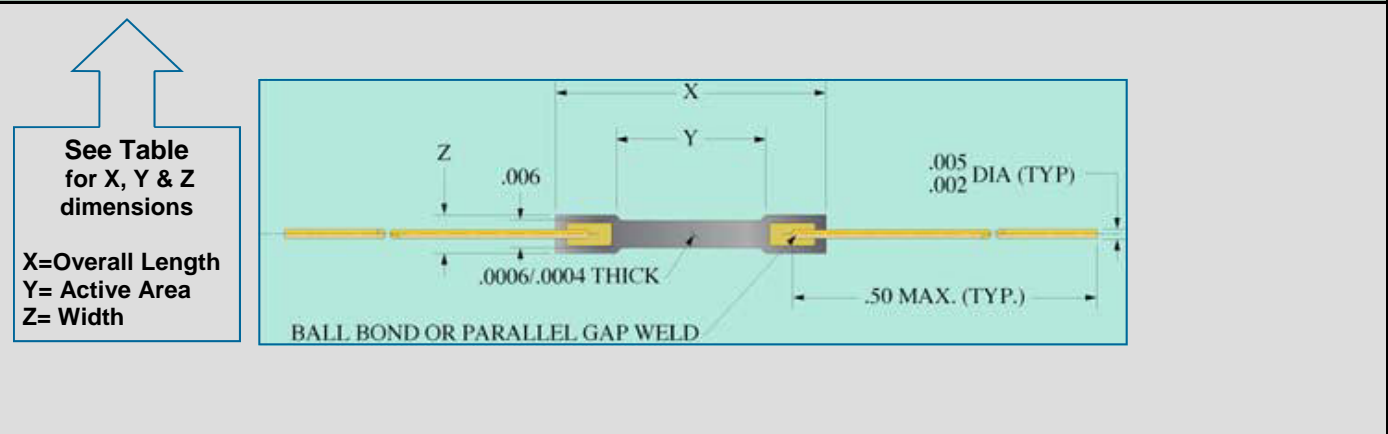
Ordering Guidelines	Example
	
A. Model (SS)	SS-080-050-500P U S4 is a Semiconductor Strain gage with a total length of 080 and an active length of 050 . The gage has a nominal resistance of 500 at 78 degrees F. The gage is further defined as Dopant P and Configured as a " U "* Gage. S4 specifies a matched set of 4 gages. Note: <ul style="list-style-type: none"> ▪ S4 Matched set of 4 gages ▪ S2 Matched set of 2 gages. ▪ S1 Single gage with data. ▪ S0 Single gage without data. *Specify Gage Type: "U", "M" or Leave Blank for Bar Gage.
B. Total Length	
C. Active Length	
D. Nominal Resistance at 78°F	
E. Dopant	
F. U Gage , M Gage, or Leave Blank for Bar Gage*	
G. Specifies Matched Gages or Bulk	

Standard Bridge Matching				
Temperature °F	0°	78°	278°	
Standard Matching	±0.6%	±0.4%	±0.4%	Percent of Base Resistance
Note: Other custom special matching gages or additional data points are available. Please contact Micron Instruments for details.				

BAR STRAIN GAGES

BAR SEMICONDUCTOR STRAIN GAGES								
Part Number	Z	Lead Attachment	Thickness	Resistance Ohms @ 78°F	Gage Factor	TCGF	TCR	
								X Y
SS-027-013-500P	.009	Ball Bond	.0004	540±50	155±10	-18%	24%	
SS-037-022-500P	.009	Ball Bond	.0004	540±50	150±10	-13%	17%	
SS-060-033-500P	.008	Welded	.0004	540±50	140±10	-13%	15%	
SS-060-033-750P	.008	Welded	.0004	750±90	145±10	-15%	18%	
SS-060-033-1000P	.008	Welded	.0004	1050±75	155±10	-18%	24%	
SS-080-050-120P	.008	Welded	.0004	120±20	120±10	-9%	5%	
SS-080-050-230P	.008	Welded	.0004	230±30	120±10	-9%	5%	
SS-080-050-345P	.008	Welded	.0004	345±40	140±10	-13%	16%	
SS-080-050-500P	.008	Welded	.0004	540±50	140±10	-13%	16%	
SS-080-050-500P	.008	Ball Bond	.0004	540±50	140±10	-13%	16%	
SS-080-050-1000P	.008	Welded	.0004	1050±75	155±10	-18%	24%	
SS-090-060-500P	.008	Welded	.0004	540±50	140±10	-13%	16%	
SS-090-060-1150P	.008	Welded	.0004	1125±75	155±10	-18%	24%	
SS-150-124-15P	.008	Welded	.0010	15±2	100±10	-10%	6%	
SS-150-124-25P	.008	Welded	.0009	25±3	100±10	-10%	6%	
SS-150-124-30P	.008	Welded	.0008	30±3	100±10	-10%	6%	
SS-150-124-40P	.008	Welded	.0007	40±4	100±10	-10%	6%	
SS-250-225-120P	.009	Welded	.0004	120±20	100±10	-10%	6%	

BAR GAGE SCHEMATIC



Other Strain Gage Data Sheets Available:

- "U" and "M" Semiconductor Strain Gage
- Backed Strain Gage
- SSGH Half Bridge Strain Gage

Call or email us to request additional data sheets.