

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					
$\begin{array}{c c} A \Rightarrow B \Rightarrow C \Rightarrow D \Rightarrow E \Rightarrow F \Rightarrow G \Rightarrow \Leftrightarrow H \end{array}$	$\boxed{SS \Rightarrow 080 \Rightarrow 050 \Rightarrow S00 \Rightarrow P \Rightarrow U \Rightarrow B \Rightarrow \leqslant S4}$					
A. Model (SS)	SS-080-050-500P U B S4 is a semiconductor strain gage with a					
B. Total Length	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 "U"* Backed Gage and S4 specifies a					
C. Active Length						
D. Nominal Resistance at 78°F	matched set of 4 gages.					
E. Dopant	Note: • S4 Matched set of 4 gages • S2 Matched set of 2 gages.					
F. U Gage, M Gage, or Leave Blank for Bar Gage*	 S1 Single gage with data. 					
G. Backed Gage	 S0 Single gage without data. 					
H. Specifies Matched Gages or Bulk	*Specify Gage Type: "U", "M" or Leave Blank for Bar Gage.					

Standard Bridge Matching					
Temperature °F Standard Matching	0° ±3Ω	$78^{\circ} \\ \pm 2\Omega$	278° $\pm 2\Omega$		

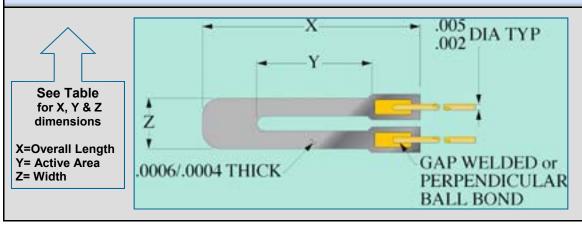
Note: Other custom special matching gages or additional data points are available. Please contact Micron Instruments for details.

INSTRUMENTS

AGES
IN GA
STRA
"M"
3

"U" SHAPED GAG	E						
Part Number X Y	Z	Lead Attachment	Thickness	Resistance Ohms @ 78°F	Gage Factor	TCGF	TCR
SS-028-008-400PU	0.016	Welded	0.0004	400 ± 40	150 ± 10	-18%	24%
SS-037-022-500PU	0.016	Welded	0.0004	540 ± 50	150 ± 10	-13%	17%
SS-047-025-500PU	0.016	Welded	0.0004	540 ± 50	140 ± 10	-13%	16%
SS-047-025-1000PU	0.016	Welded	0.0004	1000 ± 100	160 ± 10	-20%	28%
SS-060-033-300PU	0.016	Welded	0.0004	325 ± 40	100 ± 10	-10%	6%
SS-060-033-500PU	0.016	Welded	0.0004	540 ± 50	140 ± 10	-12%	14%
SS-060-033-2000PU	0.016	Welded	0.0004	2000 ± 100	155 ± 10	-18%	24%
SS-080-050-10000PU	0.013	Welded	0.0004	10000 ± 1000	175 ± 10	-23%	42%
SS-095-060-350PU	0.016	Welded	0.0004	350 ± 50	120 ± 10	-9%	5%
HILL CA CE COHEN							

"U"GAGE SCHEMATIC



"M" SHAPED GA	GE						
Part Number X Y	Z	Lead Attachment	Thickness	Resistance Ohms @ 78°F	Gage Factor	TCGF	TCR
SS-060-040-2500PM	0.032	Welded	0.004	2500 ± 150	140 ± 10	-13%	17%
"M"GAGE SCHE	MATIC						
See Table for X, Y & Z dimensions X=Overall Length Y= Active Area Z= Width	PARAL .002 DIA		008 TYP	.0006/.0004 THICK	.008 .013 TYP		