

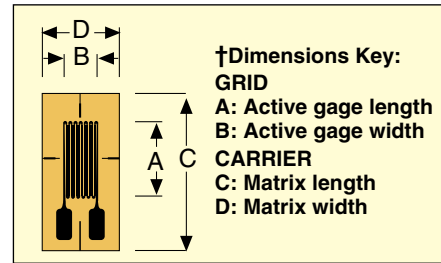
# TRANSDUCER QUALITY STRAIN GAGE

## LINEAR PATTERN STRAIN GAGES

The linear pattern strain gages are used to measure strain in a single direction. They are used for experimental stress analysis, and transducer applications. The strain gage pattern is shown on the left side of the table. The "arrows" indicate the principal stress direction of the gage. OMEGA offers miniature linear patterns for strain measurement of a stress concentration or high gradient areas, and larger sizes. The solder pads/ribbon leads are offered both at one end of the grid, or with one at each end of the grid. Wide or narrow linear grid patterns are available.

Dimensions are listed for pattern gage grid length (A) and width (B), and the matrix or carrier length (C) and width (D). The patterns include alignment triangles.

**Note:** To determine if the strain gages have temperature characteristics matched to steel or aluminum, see the column labeled "COMP" short for compensation, "ST" indicates steel, "AL" indicates aluminum. See the column labeled "BTP" for accessory bondable terminal pad model numbers.



To Order										
GAGE PATTERN Leads not shown	MODEL NO. Pkg of 5	NOM. RESISTANCE ( $\Omega$ )	DIMENSIONS mm (inch)†				MAX V* (Vrms)	TERMINATION	TEMP COMP	TERM PAD
			GRID		CARRIER					
			A	B	C	D				
 Shown actual size 4 mm	SGT-1/350-TY11	350	1.0	1.8	4.0	3.0	4.5	Ribbon Leads	ST	BPT-1
	SGT-1/350-TY13	350	(0.039) (0.071) (0.157) (0.118)				6	Ribbon Leads	AL	
	SGT-1/350-TY41	350	Miniature linear pattern, measurement of stress concentration				4.5	Solder Pads	ST	
	SGT-1/350-TY43	350	350 $\Omega$				6	Solder Pads	AL	
 Shown actual size, 5.6 mm	SGT-1A/1000-TY11	1000	1.5	2.9	5.6	4.1	11	Ribbon Leads	ST	BPT-1
	SGT-1A/1000-TY13	1000	(0.059) (0.114) (0.22) (0.161)				15	Ribbon Leads	AL	
	SGT-1A/1000-TY41	1000	Miniature linear pattern, grid width, wide, higher resistance, reduced heat generation				11	Solder Pads	ST	
	SGT-1A/1000-TY43	1000	1000 $\Omega$				15	Solder Pads	AL	
 Shown actual size, 6.4 mm	SGT-2C/350-TY11	350	1.5	4.6	6.4	6.4	9	Ribbon Leads	ST	BPT-2
	SGT-2C/350-TY13	350	(0.059) (0.181) (0.252) (0.252)				12	Ribbon Leads	AL	
	SGT-2C/350-TY41	350	Miniature linear pattern, grid width, extra wide				9	Solder Pads	ST	
	SGT-2C/350-TY43	350	350 $\Omega$				12	Solder Pads	AL	
 Shown actual size, 8.8 mm	SGT-3E/350-TY11	350	3.0	3.1	8.8	5.5	10	Ribbon Leads	ST	BPT-2
	SGT-3E/350-TY13	350	(0.118) (0.122) (0.346) (0.217)				14	Ribbon Leads	AL	
	SGT-3E/350-TY41	350	Small linear pattern, lead/pad at each side of grid				10	Solder Pads	ST	
	SGT-3E/350-TY43	350	350 $\Omega$				14	Solder Pads	AL	



DISCOUNT SCHEDULE	
1 to 10 pkgs. ....	Net
11 to 24 pkgs. ....	5%
25 to 49 pkgs. ....	10%
50 and up and OEM . .	Consult Factory

\* Maximum permitted bridge energizing voltage (Vrms).  
**Note:** For strain gage accessories, visit us online.  
**Ordering Example:** SGT-3E/350-TY41, 350  $\Omega$  transducer quality uniaxial strain gage.

**NOTE**  
 ST = Steel  
 AL = Aluminum

# TRANSDUCER QUALITY STRAIN GAGE

## LINEAR PATTERN STRAIN GAGES

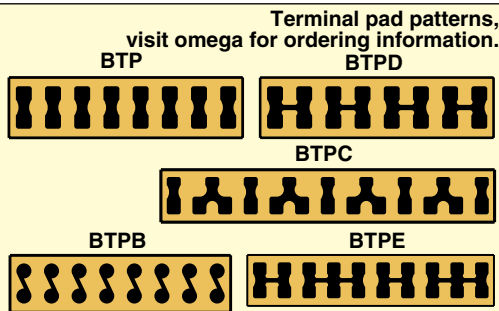
### BONDABLE TERMINAL PADS

When installing strain gages with ribbon leads or solder pads, use Bondable Terminal Pads (BTP) between the strain gage and the wires to your instrumentation.

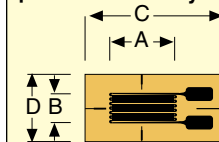
The Bondable Terminal Pads provide a large easy to use soldering area and provide strain relief between the strain gage and the heavy instrument wires.

Using Bondable Terminal Pads is simple. Use the same adhesive and bonding procedure on the Bondable Terminal Pads as you use on the strain gage.

OMEGA offers BTPs in several sizes and wiring configurations to fit most all strain gage applications.



† Dimensions Key:



GRID

A: Active gage length  
B: Active gage width

CARRIER

C: Matrix length  
D: Matrix width

### To Order



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			GRID		CARRIER					
			A	B	C	D				
 Shown actual size 7.5 mm 	SGT-3F/350-TY11	350					4.5	Ribbon Leads	ST	BPT-3
	SGT-3F/350-TY13	350	3.2	3.2	7.5	4.6	6	Ribbon Leads	AL	
	SGT-3F/350-TY41	350	Medium linear pattern				10	Solder Pads	ST	
	SGT-3F/350-TY43	350	350 $\Omega$				14	Solder Pads	AL	
 Shown actual size 8.6 mm 	SGT-3J/350-TY11	350					8	Ribbon Leads	ST	BPT-3
	SGT-3J/350-TY13	350	3.0	2.1	8.6	3.5	12	Ribbon Leads	AL	
	SGT-3J/350-TY41	350	Medium linear pattern, lead/pad at each end of grid				8	Solder Pads	ST	
	SGT-3J/350-TY43	350	350 $\Omega$				12	Solder Pads	AL	
 Shown actual size 6.6 mm 	SGT-3S/350-TY11	350					7.5	Ribbon Leads	ST	BPT-3
	SGT-3S/350-TY13	350	3.0	1.7	6.6	3.3	10.5	Ribbon Leads	AL	
	SGT-3S/350-TY41	350	Medium linear pattern, grid width, narrow				7.5	Solder Pads	ST	
	SGT-3S/350-TY43	350	350 $\Omega$				10.5	Solder Pads	AL	
 Shown actual size 7 mm 	SGT-3N/350-TY11	350					8	Ribbon Leads	ST	BPT-3
	SGT-3N/350-TY13	350	3.2	2.5	7.0	4.0	13	Ribbon Leads	AL	
	SGT-3N/350-TY41	350	Medium linear pattern, both leads/pads at one end of grid				8	Solder Pads	ST	
	SGT-3N/350-TY43	350	350 $\Omega$				13	Solder Pads	AL	

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STRAIN GAGES