MICRO MEASUREMENTS
A VPG Brand

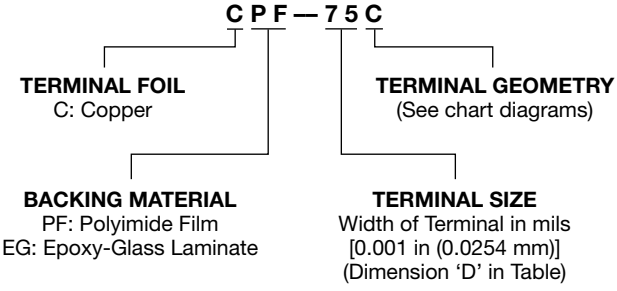
Terminal Details and Descriptions

For many types of strain gages (i.e., Micro-Measurements EA-Series), instrument leadwires generally should not be attached directly to the solder tabs of the gage. Instead, the normal practice is to install bondable terminals adjacent to the gage and solder the instrument leadwires to these. Small, flexible jumper wires, curved to form strain relief loops, are then connected from the terminals to the gage solder tabs. The accompanying drawings show typical strain gage terminal installations (see also Application Note TT-603. "The Proper Use of Bondable Terminals in Strain Gage Applications").

Pb-free
RoHS COMPLIANT

TERMINAL CONSTRUCTION

Micro-Measurements bondable terminals are specially designed for use in strain gage circuits. They are produced from 0.0014-in (0.036-mm) thick, copper foil, laminated on either of two types of backing material. Both backings are readily bondable with strain gage adhesives. Terminals are offered in four different geometries, and in a range of sizes to suit varying gage installation needs.



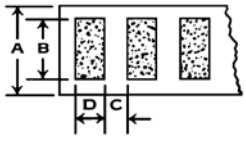
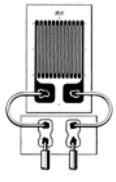
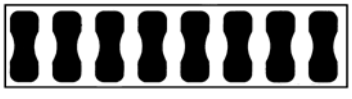
BACKING MATERIALS

TYPE PF POLYIMIDE FILM:

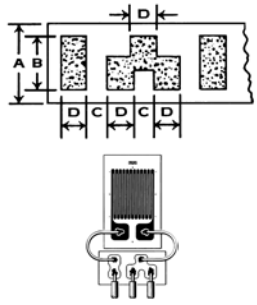
0.003 in (0.08 mm) thick. This is the preferred general-purpose backing material. It is more flexible and conformable than the Type EG, although not as strong. Type PF backing combines high-temperature capability, resistance to soldering damage and good electrical properties. It is suitable for long-term use at +450° to +500°F (+230° to +260°C), limited primarily by gradual oxidation of the copper foil interface. The relatively high thermal expansion coefficient of unfilled polyimide can cause loss of bond at temperatures below –100°F (–75°C).

TYPE EG EPOXY-GLASS LAMINATE:

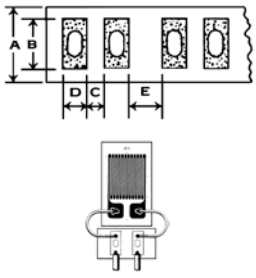
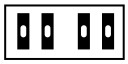
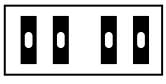
0.005 in (0.13 mm) thick. This special laminate provides a strong but flexible backing for terminals. It is suitable for long-term use at +300°F (+150°C), and is recommended for cryogenic applications at temperatures down to –452°F (–269°C). The radius of curvature of the mounting surface should generally be greater than 1/8 in (3 mm).

Terminal Detail and Description	Terminal Pattern (Actual Size)	Dimensions "A" dimensions nominal A	B	C	D	Order Number	Package Strips of 4 Pairs
  **Suffix C:** General-purpose. Widely used between gage jumper wires and main leadwire system. Suitable for many bridge intraconnection applications.		0.11 (2.7)	0.065 (1.65)	0.025 (0.64)	0.025 (0.64)	CEG-25C CPF-25C	70
		0.14 (3.4)	0.095 (2.41)	0.030 (0.76)	0.038 (0.97)	CEG-38C CPF-38C	60
		0.18 (4.5)	0.125 (3.18)	0.036 (0.91)	0.050 (1.27)	CEG-50C CPF-50C	50
		0.25 (6.4)	0.190 (4.83)	0.040 (1.02)	0.075 (1.91)	CEG-75C CPF-75C	30
		0.33 (8.4)	0.250 (6.35)	0.070 (1.78)	0.100 (2.54)	CEG-100C CPF-100C	20
		0.48 (12.1)	0.375 (9.53)	0.070 (1.78)	0.150 (3.81)	CEG-150C CPF-150C	10

Terminal Details and Descriptions

Terminal Detail and Description	Terminal Pattern (Actual Size)	Dimensions "A" dimensions nominal A	B	C	D	Order Number	Package Strips of 4 Pairs
 **Suffix D:** Designed for installations with 2-wire jumper arrangement to gage and a 3-wire main lead system.		0.18 (4.5)	0.125 (3.18)	0.036 (0.91)	0.050 (1.27)	CEG-50D CPF-50D	30
		0.21 (5.3)	0.150 (3.81)	0.038 (0.97)	0.060 (1.52)	CEG-60D CPF-60D	25
		0.25 (6.4)	0.190 (4.83)	0.040 (1.02)	0.075 (1.91)	CEG-75D CPF-75D	20
		0.33 (8.4)	0.250 (6.35)	0.050 (1.27)	0.100 (2.54)	CEG-100D CPF-100D	15

Terminal Assortment	Order Number	Package Strips of 4 Pairs
Contains 2 strips of C and D patterns, except 1 strip of the 150C and 100D designs	CPF-AST	18

Terminal Detail and Description	Terminal Pattern (Actual Size)	Dimensions "A" dimensions nominal A	B	C	D	E	Order Number	Package Pairs
 **Suffix S:** Primarily used where soldering and desoldering may be encountered. Hole in center produces thermal isolation at each end of terminal. Not recommended for high cyclic endurance. Available only in epoxy-glass backing.		0.13 (3.2)	0.063 (1.60)	0.021 (0.53)	0.021 (0.53)	0.042 (1.07)	CEG-21S	200
		0.21 (5.2)	0.125 (3.18)	0.042 (1.07)	0.042 (1.07)	0.084 (2.13)	CEG-42S	100
		0.29 (7.4)	0.190 (4.83)	0.063 (1.60)	0.063 (1.60)	0.126 (3.20)	CEG-63S	100
		0.37 (9.4)	0.250 (6.35)	0.083 (2.11)	0.083 (2.11)	0.166 (4.22)	CEG-83S	60

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