T E C H N I C A L  C H A R A C T E R I S T I C S

MATERIALS AND FINISHES:
Insulator: Glass-filled DAP per ASTM-D-5948 Type SDG-F. Gray color is standard.
Fixed Contacts: Precision machined copper alloy, gold flash over nickel. Other finishes are available upon request.

MECHANICAL CHARACTERISTICS:
Contacts: Male contact, 1.02 mm [0.040 inch] mating diameter. Female contact, open entry is standard. “Closed Entry” available on solder cup termination for high reliability applications.
Contact Retention in Connector Insert: 44.5 N [10 lbs.], minimum.
Contact Termination: Solder cup - 1.17 mm [0.046 inch] hole diameter for 0.5mm² [20 AWG] wire maximum.

ELECTRICAL CHARACTERISTICS:
Contact Current Rating: 7.5 amperes, maximum.
Initial Contact Resistance: 0.010 ohms, maximum.
Flash over Voltage: 2000 VAC (rms).
Test Voltage: 1200 VAC (rms).
Insulation Resistance: 5 G ohms, minimum.
Clearance and Creepage: 0.97 mm [0.038 inch], minimum.
Working Voltage: 300 VAC (rms).

CLIMATIC CHARACTERISTICS:
Temperature Range: -55°C to +125°C.
Damp Heat, Steady State: 21 days.
**INSULATOR DIMENSIONS**

Male or female contacts may be populated in any position.

### RIGHT PANEL MOUNTED *1

**GF 2-POLE**

- Dimensions: 8.69 [0.342], 4.37 [0.172], 3.18 [0.125], 1.57 [0.062], 11.13 [0.438], 5.54 [0.218], Ø2.36 [Ø0.093], 7.14 [0.281]

- Panel shown for reference only.

### LEFT PANEL MOUNTED *1

- Dimensions: 8.69 [0.342], 4.37 [0.172], 3.18 [0.125], 1.57 [0.062], 11.13 [0.438], 5.54 [0.218], Ø2.36 [Ø0.093], 7.14 [0.281]

- Panel shown for reference only.

### RIGHT PANEL MOUNTED *1

**GF 4-POLE**

- Dimensions: 6.35 [0.250], 3.18 [0.125], 1.57 [0.062], 8.69 [0.342], 4.37 [0.172], 3.18 [0.125], 1.57 [0.062], 11.13 [0.438], 5.54 [0.218], Ø2.36 [Ø0.093], 7.14 [0.281]

- Panel shown for reference only.

### LEFT PANEL MOUNTED *1

- Dimensions: 6.35 [0.250], 3.18 [0.125], 1.57 [0.062], 8.69 [0.342], 4.37 [0.172], 3.18 [0.125], 1.57 [0.062], 11.13 [0.438], 5.54 [0.218], Ø2.36 [Ø0.093], 7.14 [0.281]

- Panel shown for reference only.

**NOTE:** *1 When viewing the connector from the rear with the “A” contact position down, the panel on the left dictates “L” code while the panel on the right dictates “R” code. See ordering information page “Step 5”.

### SOLDER CUP TERMINATION

**CODE SC**

- Typical part number: GF1M1FASCL
- Typical part number: GF1M1FBSCR

- Dimensions: 19.05 [0.750], 13.43 [0.529], Ø1.17 [0.046], 5.02±0.03 [0.040±0.001]

### STRAIGHT SOLDER PRINTED BOARD MOUNT TERMINATION

**CODE DS3, DS4, DS5 AND DS6**

- Typical part number: GF1M1FADS3L
- Typical part number: GF1M1FBDS3R

- Dimensions: 0.64 [0.025], 5.62 [0.221], Ø1.02±0.03 [Ø0.040±0.001]

**CONTACT CODE** | **L** | **O.A.L.**
--- | --- | ---
DS3 | 2.36 [0.093] | 17.37 [0.684]
DS4 | 3.18 [0.125] | 18.19 [0.716]
DS5 | 3.96 [0.156] | 18.97 [0.747]
DS6 | 4.75 [0.187] | 19.79 [0.779]
RIGHT ANGLE (90°) PRINTED BOARD MOUNT TERMINATION
AVAILABLE IN VERTICAL OR HORIZONTAL MOUNTS

**GF / GFPL SERIES**
PROFESSIONAL QUALITY UTILITY CONNECTORS
FIXED CONTACT / LOW PROFILE

**UNIQUE FEATURES**
GF and GFPL connectors can be “STACKED” in building block fashion to create custom configurations.

**NOTE:**
Positronic recommends the use of a #2 82° countersunk screw.

DIMENSIONS ARE IN MILLIMETERS [INCHES].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
### ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 through 5.

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**STEP 1 - BASIC SERIES**
- GF - Solder cup or straight printed board mount termination

**STEP 2 - QUANTITY AND GENDER OF CONTACTS**
- 2 POLE INSULATOR
  - 2M0 - 2 Male, No Female.
  - 2F0 - 2 Female, No Male.
  - 1M1F - 1 Male, 1 Female.
- 4 POLE INSULATOR
  - 4M0 - 4 Male, No Female.
  - 4F0 - 4 Female, No Male.
  - 3M1F - 3 Male, 1 Female.
  - 3F1M - 3 Female, 1 Male.
  - 2M2F - 2 Male, 2 Female.

**STEP 3 - POSITION OF POLARIZING CONTACT**
- All contacts same gender
- A, B, C, D

**EXAMPLES:**
- GF4M0DS3R
- GF1M1FASCL
- GF2M2FCDASCL

**STEP 4 - CONTACT TERMINATION TYPE**
- SC - Solder cup. For closed entry design, add “CE” in Step 6.
- DS3 - Solder, Straight printed board mount with 2.36 [0.093] tail length.
- DS4 - Solder, Straight printed board mount with 3.18 [0.125] tail length.
- DS5 - Solder, Straight printed board mount with 3.96 [0.156] tail length.
- DS6 - Solder, Straight printed board mount with 4.75 [0.187] tail length.

**STEP 5 - MOUNTING OPTIONS**
- L - Left panel mount.
- R - Right panel mount.

**STEP 6 - SPECIAL OPTIONS**
- CE - Closed entry contacts on female solder cup terminations
- -14 - 0.000030 [0.76] gold over nickel.

Contact Technical Sales for special options.

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**ORDERING INFORMATION - CODE NUMBERING SYSTEM**

Specify Complete Connector By Selecting An Option From Step 1 through 5.

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**STEP 1 - BASIC SERIES**
- GFPL - Right angle (90°) printed board mount termination

**STEP 2 - QUANTITY AND GENDER OF CONTACTS**
- 2 POLE INSULATOR
  - 2M0 - 2 Male, No Female.
  - 2F0 - 2 Female, No Male.
  - 1M1F - 1 Male, 1 Female.
- 4 POLE INSULATOR
  - 4M0 - 4 Male, No Female.
  - 4F0 - 4 Female, No Male.
  - 3M1F - 3 Male, 1 Female.
  - 3F1M - 3 Female, 1 Male.
  - 2M2F - 2 Male, 2 Female.

**STEP 3 - POSITION OF POLARIZING CONTACT**
- All contacts same gender
- A, B, C, D

**EXAMPLES:**
- GFPL4M00RV
- GFPL3M1F0AH
- GFPL2M2F0CD0LV

**STEP 4 - CONTACT TERMINATION TYPE**
- 0 - Right angle (90°) printed board mount.

**STEP 5 - MOUNTING OPTIONS**
- LV - Left panel vertical mount.
- RV - Right panel vertical mount.
- H - Horizontal mount.

**STEP 6 - SPECIAL OPTIONS**
- -14 - 0.000030 [0.76] gold over nickel.

Contact Technical Sales for special options.