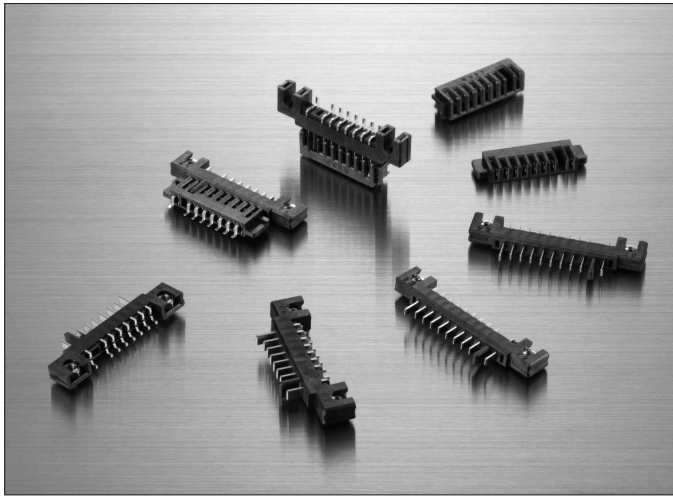


**2mm Pitch 2 Piece
Battery Connector for Lithium-ion / Lithium-polymer**

GF SERIES




ORDER CODE
GF - - **F**

- **F** : RoHS Compliance
- For GF01 and GF02, Nuts
 - 1 : With Nuts
 - 12 : Without Nuts
- For GF12, Tail length
 - 1 : 1.5mm
 - 2 : 2.3mm
- For GF11, GF21, GF22 and GF31, Packaging style
 - 1 : Tray
- No. of contacts
 - 08 : 8 pin
 - 10 : 10 pin (GF21, GF22 and GF31 only)
- Variation
 - 01 : Plug, (SMT Standard type)
 - 02 : Plug, (SMT Reverse type)
 - 11 : Receptacle, (SMT type)
 - 12 : Receptacle, (Through hole type)
 - 21 : Plug, (Low Profile, SMT Standard type)
 - 22 : Plug, (Low Profile, SMT Reverse type)
 - 31 : Receptacle, (Low Profile, SMT type)
- Series Name
 - GF : 2mm pitch 2 piece battery connector

FEATURES

- Low profile battery connectors (GF21/GF22/GF31 only) with 2.6mm (0.102") height.
- 2 piece type with a highly reliable connection
- Sequence connection (FMLB : First Mate Last Break, 1 pin only) is available
- 2mm (0.079") pitch connector
- 2 mating variation (Horizontal and Vertical)
- Assures 5,000 mating cycles
- RoHS compliance

SPECIFICATIONS

- Insulator material : Glass-filled LCP (UL94V-0), Black
- Contact material : Phosphor Bronze
- Contact plating : Contact area; Gold over Nickel
Terminal area; Gold over Nickel
- M2 Hexagon Nut : Steel
- M2 Hexagon Nut plating : Nickel
- Current rating : [GF0□ X GF1□]
 - 7A per contact (2 contacts only)
 - 0.5A per contact (other contact)
- [GF2□ X GF1□/31]
 - 5A per contact (2 contacts only)
 - 0.5A per contact (other contact)
- Current voltage : 30V DC
- Contact resistance : 20mΩ max.
- Dielectric withstanding voltage : 650V AC for 1 minute
- Insulation resistance : 500MΩ min. at 500V DC
- Operating temperature : -55°C to +85°C

GF Series Mating Combination

		Receptacle Connector		
		GF11-08-1F	GF12-08-□F	GF31-□□-1F
Plug Connector	GF01-08-1F	Horizontal/Vertical	Horizontal/Vertical	No
	GF01-08-12F	Horizontal/Vertical	Horizontal/Vertical	No
	GF02-08-1F	Horizontal/Vertical	Horizontal/Vertical	No
	GF02-08-12F	Horizontal/Vertical	Horizontal/Vertical	No
	GF21-□□-1F	Horizontal	Horizontal	Horizontal
	GF22-□□-1F	Horizontal	Horizontal	Horizontal

Mating Variation

Unit:mm(inch)

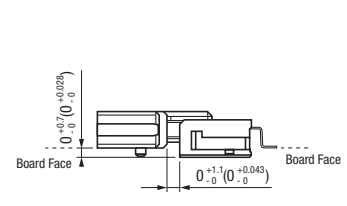
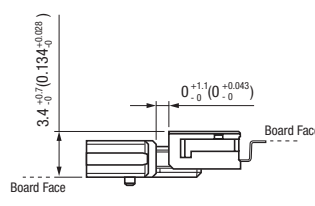
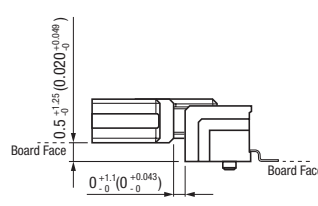
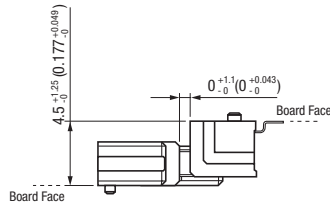
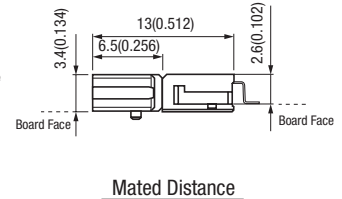
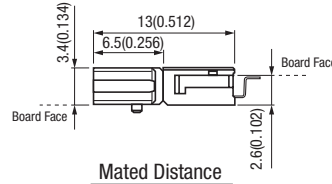
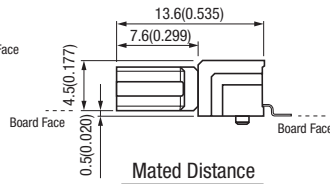
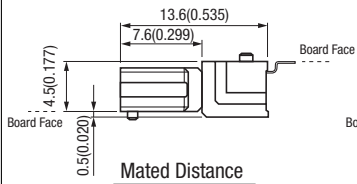
Horizontal Mating

PLUG : GF 01 - 08 - 1□F
RECEPTACLE : GF 1□ - 08 - □F

PLUG : GF 02 - 08 - 1□F
RECEPTACLE : GF 1□ - 08 - □F

PLUG : GF 21 - □□ - 1F
RECEPTACLE : GF 31 - □□ - 1F

PLUG : GF 22 - □□ - 1F
RECEPTACLE : GF 31 - □□ - 1F



Effective Contact Displacement Range

Effective Contact Displacement Range

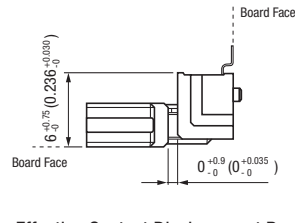
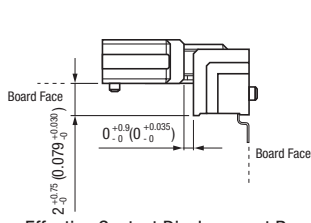
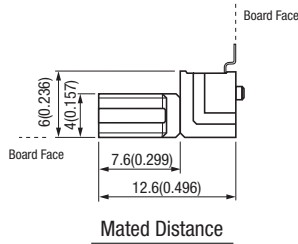
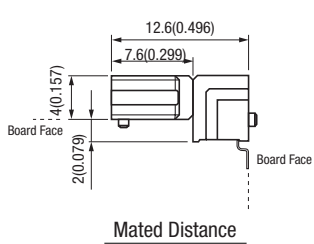
Effective Contact Displacement Range

Effective Contact Displacement Range

Vertical Mating

PLUG : GF 01 - 08 - 1□F
RECEPTACLE : GF 1□ - 08 - □F

PLUG : GF 02 - 08 - 1□F
RECEPTACLE : GF 1□ - 08 - □F



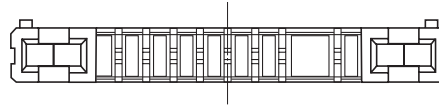
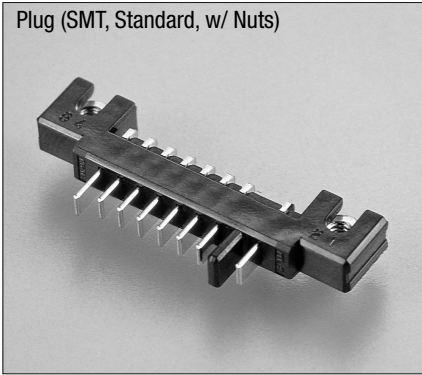
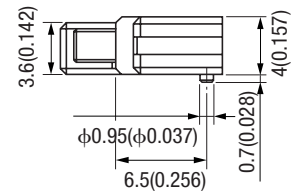
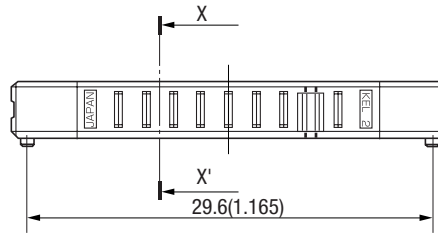
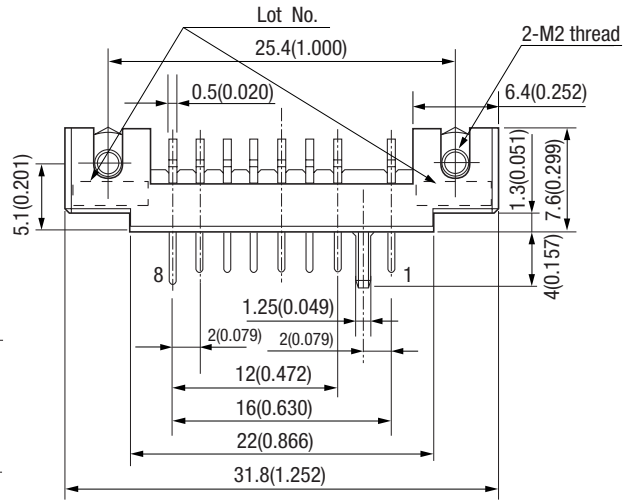
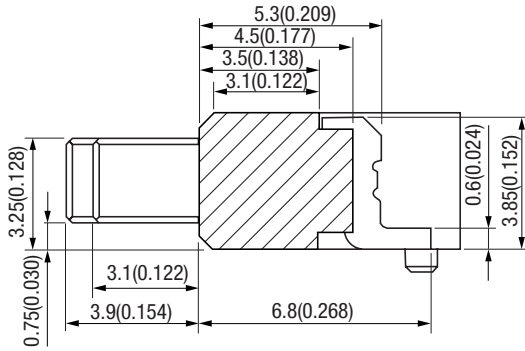
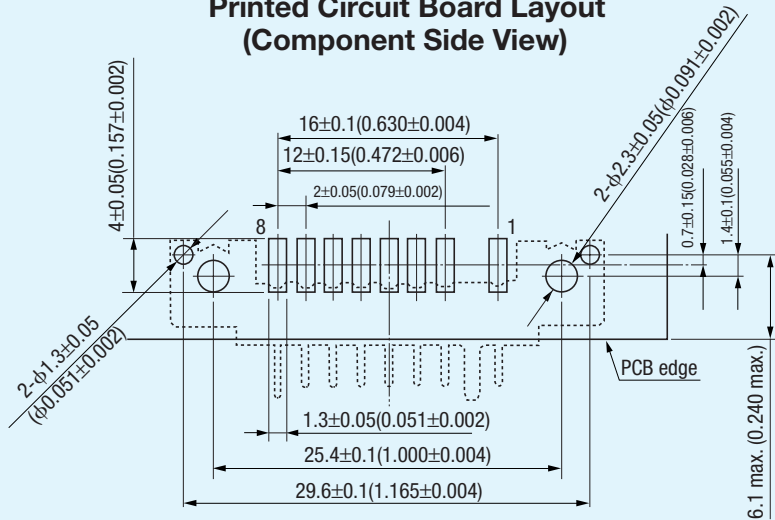
Effective Contact Displacement Range

Effective Contact Displacement Range

GF01-08-1F (Plug)

Unit:mm(inch)

Plug (SMT, Standard, w/ Nuts)


X-X' Cross Section

Printed Circuit Board Layout (Component Side View)

Product Table

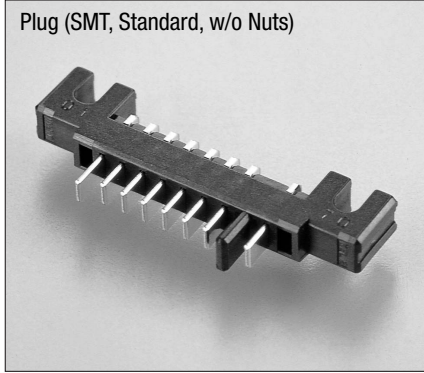
No. of contacts	Part Number	Number of packaging
8	GF01-08-1F	500

 Packaging style
 Embossed tape

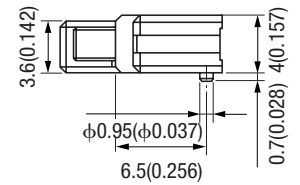
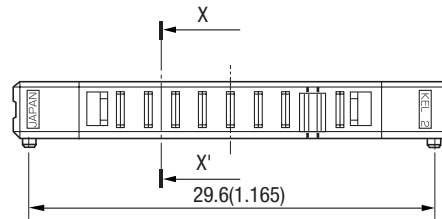
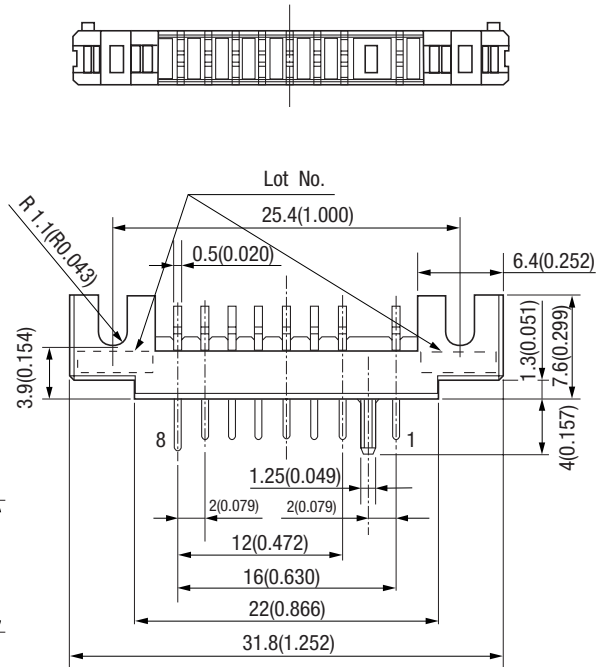
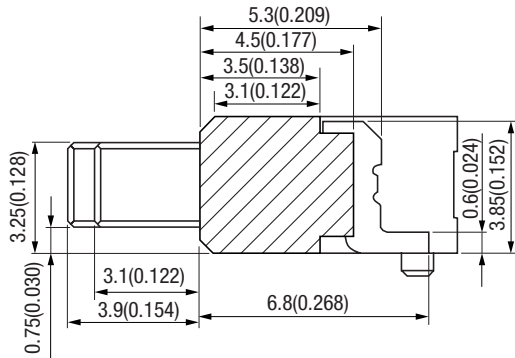
GF01-08-12F (Plug)

Unit:mm(inch)

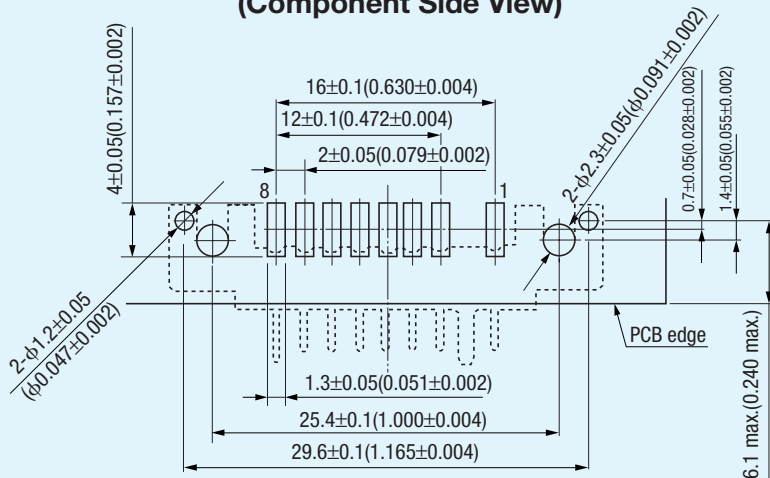
Plug (SMT, Standard, w/o Nuts)



X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



Packaging style
Embossed tape

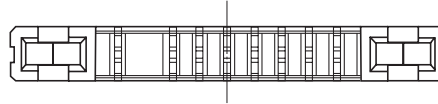
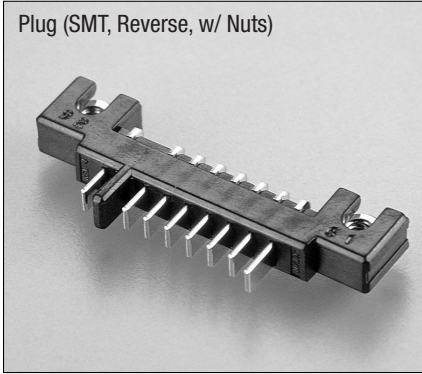
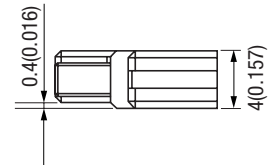
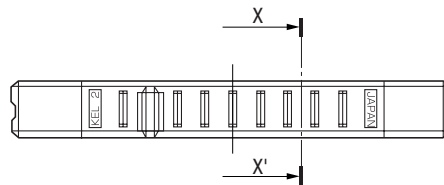
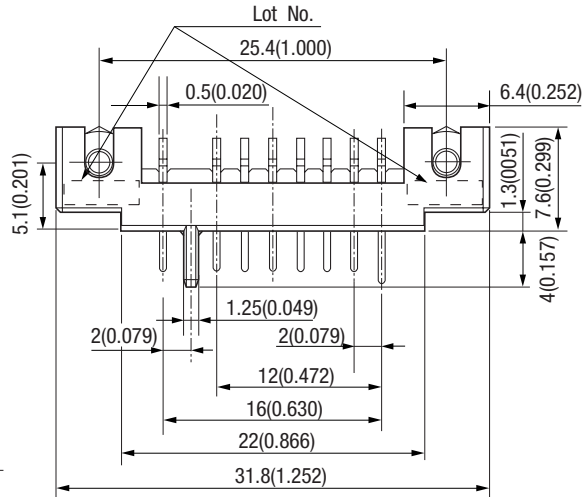
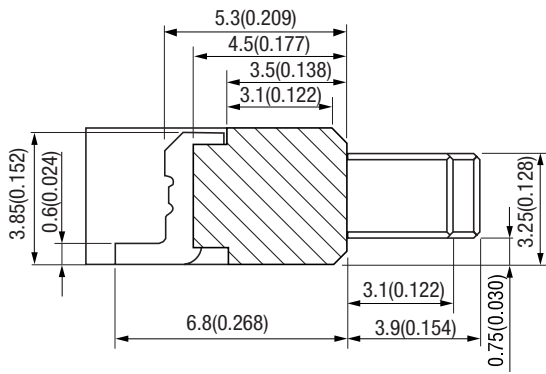
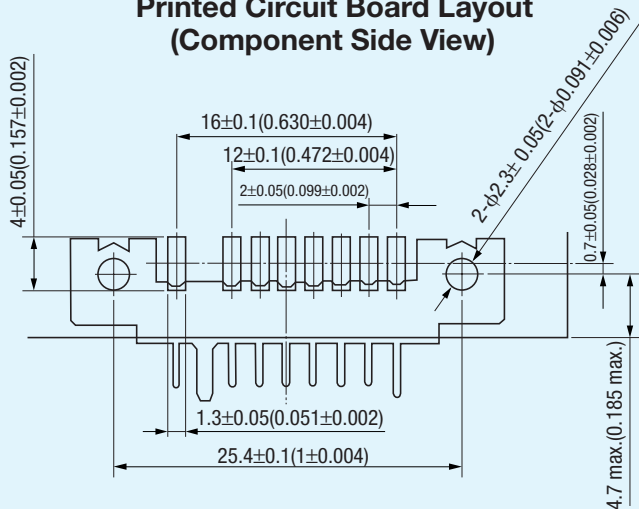
Product Table

No. of contacts	Part Number	Number of packaging
8	GF01-08-12F	500

GF02-08-1F (Plug)

Unit:mm(inch)

Plug (SMT, Reverse, w/ Nuts)


X-X' Cross Section

Printed Circuit Board Layout (Component Side View)


Packaging style
Tray

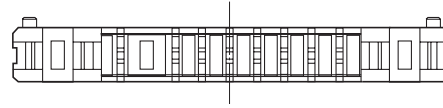
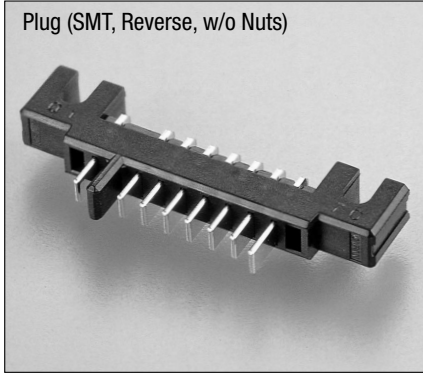
Product Table

No. of contacts	Part Number	Number of packaging
8	GF02-08-1F	50

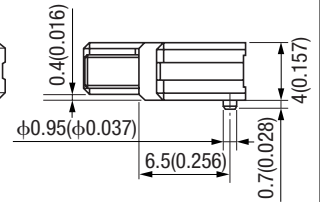
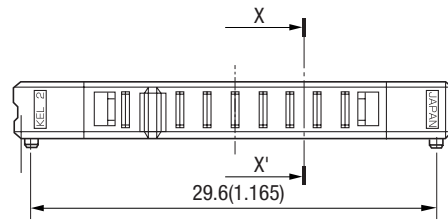
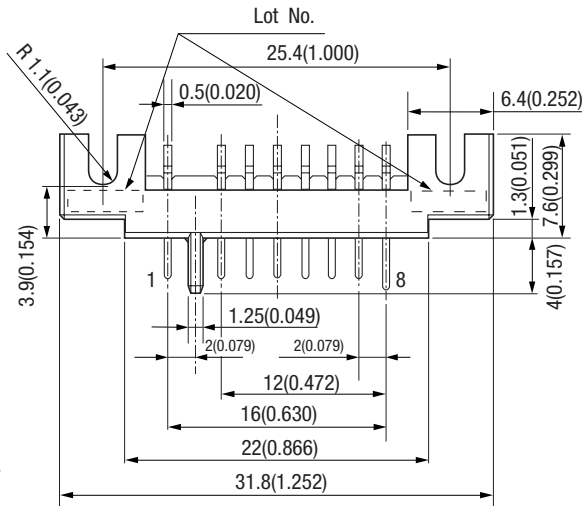
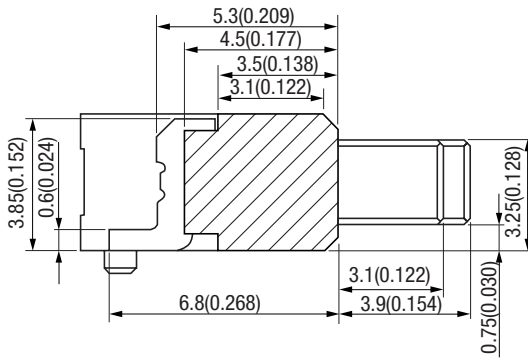
GF02-08-12F (Plug)

Unit:mm(inch)

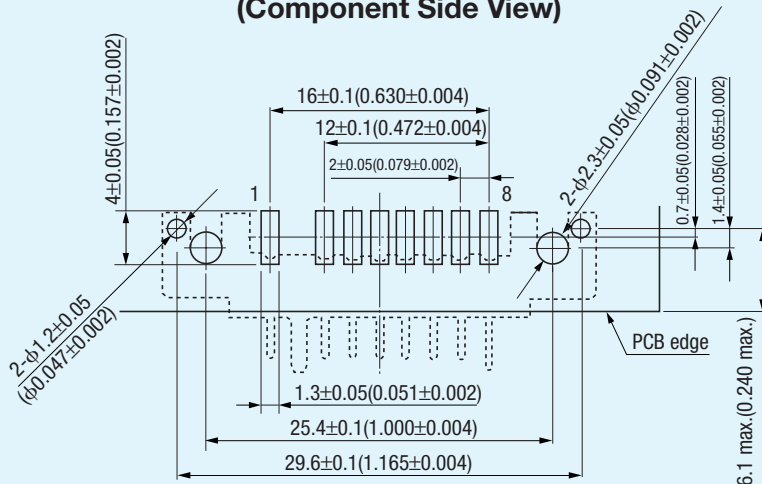
Plug (SMT, Reverse, w/o Nuts)



X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



Product Table

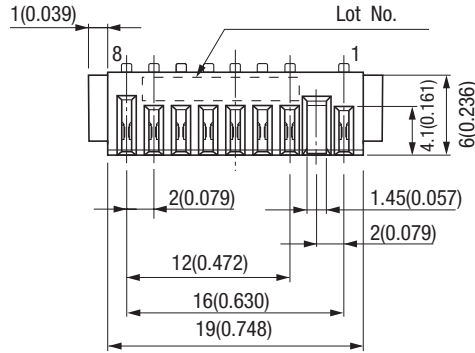
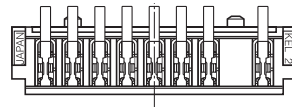
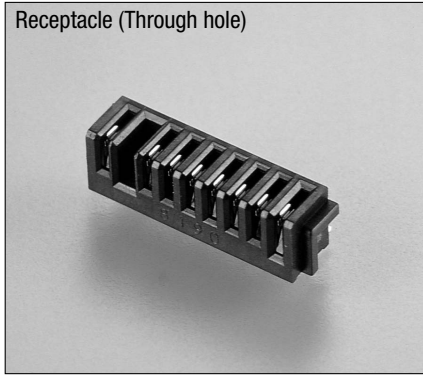
No. of contacts	Part Number	Number of packaging
8	GF02-08-12F	500

Packaging style
Embossed tape

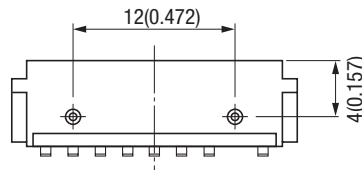
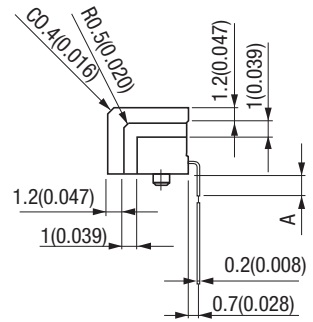
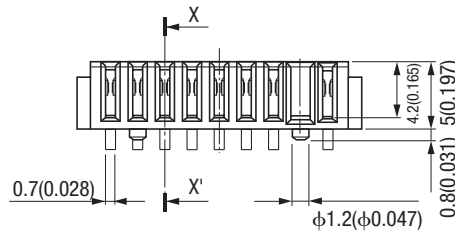
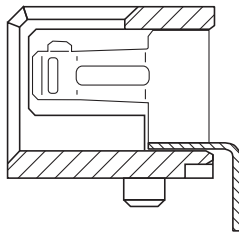
GF12-08-□F (Receptacle)

Unit:mm(inch)

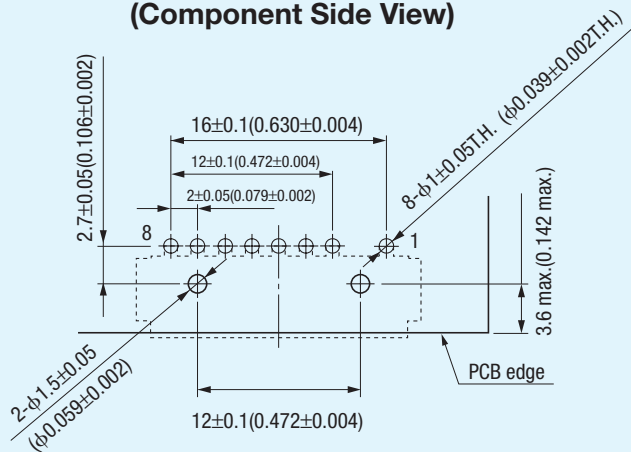
Receptacle (Through hole)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



Packaging style
Tray

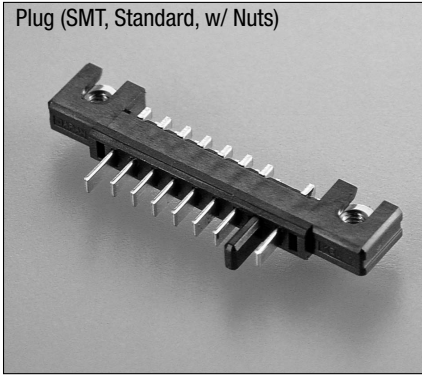
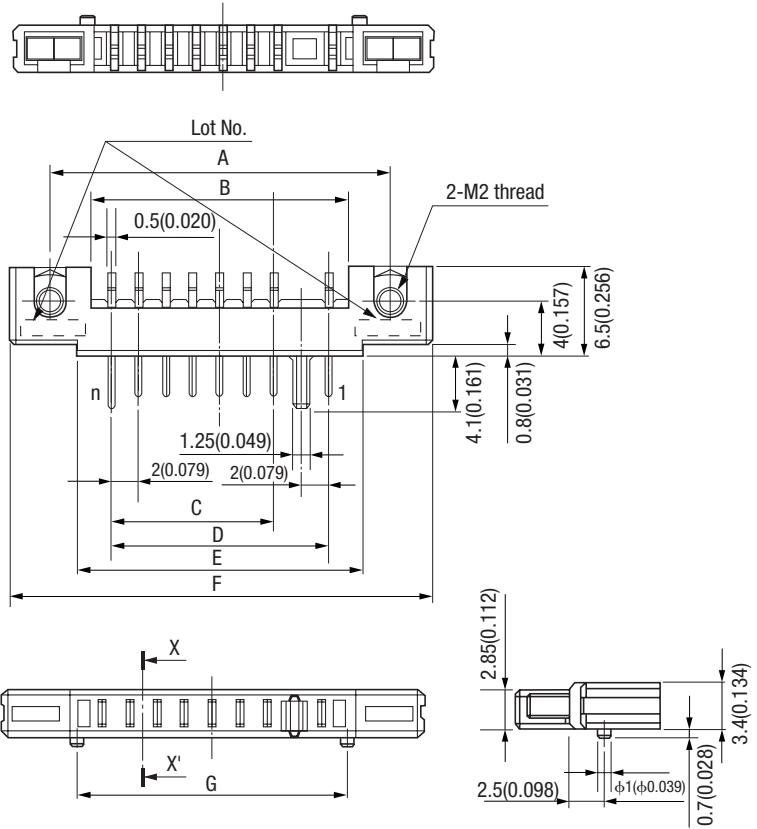
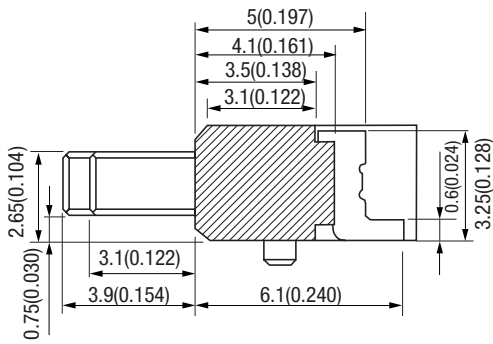
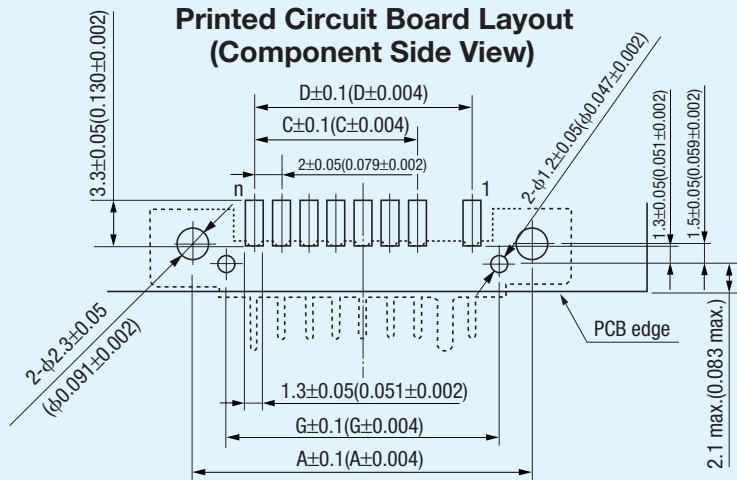
Product Table / Dimensions

No. of contacts	Part Number	A	Number of packaging
8	GF12-08-1F	1.5(0.059)	90
8	GF12-08-2F	2.3(0.091)	90

GF21-□□-1F (Plug)

Unit:mm(inch)

Plug (SMT, Standard, w/ Nuts)


X-X' Cross Section

Printed Circuit Board Layout (Component Side View)


"n" is number of contacts.

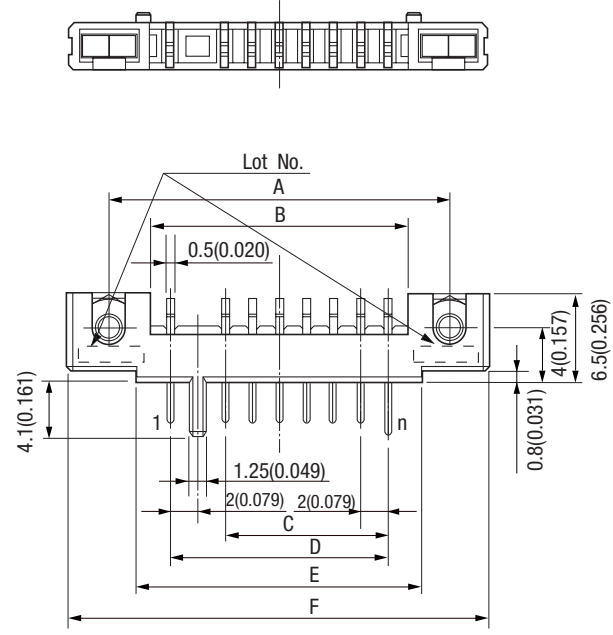
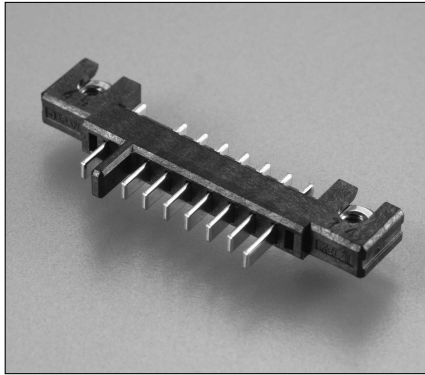
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
8	GF21-08-1F	25.0(0.984)	19.0(0.748)	12.0(0.472)	16.0(0.630)	21.0(0.827)	31.0(1.220)	20.0(0.787)	32
10	GF21-10-1F	29.0(1.142)	23.0(0.906)	16.0(0.630)	20.0(0.787)	25.0(0.984)	35.0(1.378)	24.0(0.945)	32

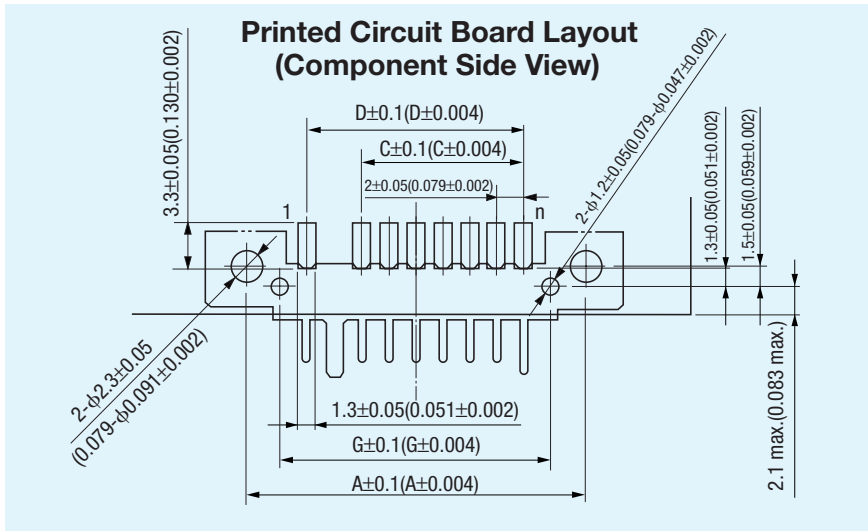
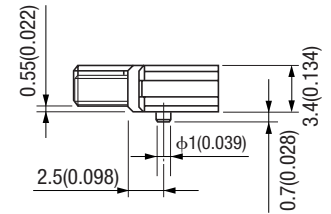
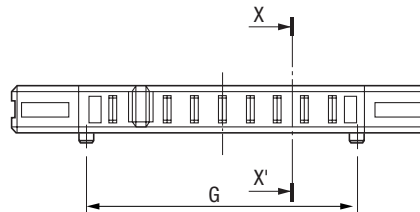
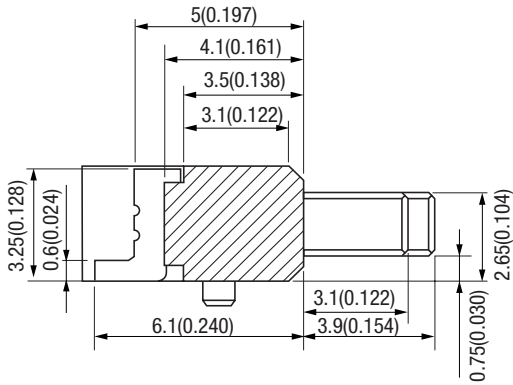
Packaging style
Tray

GF22-□□-1F (Plug)

Unit:mm(inch)



X-X' Cross Section



"n" is number of contacts.

Packaging style
Tray

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
8	GF22-08-1F	25.0(0.984)	19.0(0.748)	12.0(0.472)	16.0(0.630)	21.0(0.827)	31.0(1.220)	20.0(0.787)	32
10	GF22-10-1F	29.0(1.142)	23.0(0.906)	16.0(0.630)	20.0(0.787)	25.0(0.984)	35.0(1.378)	24.0(0.945)	32

