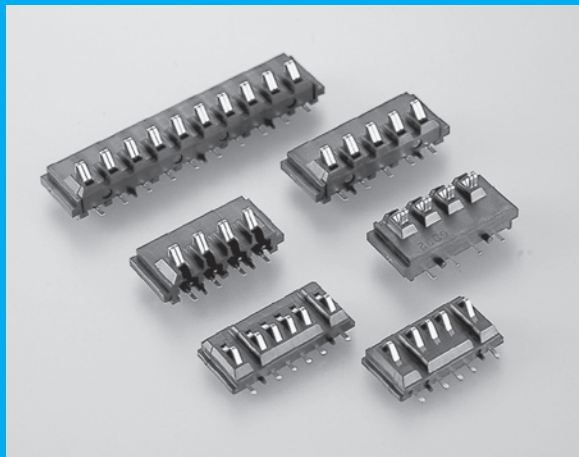


GC / GD SERIES

5mm PITCH / 3mm PITCH 1 PIECE BATTERY CONNECTOR

RoHS
Compliant



FEATURES

- ▶ In spite of its compact design, it ensures stroke displacement of 2.5mm for GC series and 2.3mm for GD series.
- ▶ Contact structure equipped with self-cleaning mechanism.
- ▶ Life is 10,000 cycles for GC series and 5,000 cycles for GD series.
(Nickel plated battery terminal is changed every 1,000 cycles)
- ▶ Highly reliable and stable contact design.
- ▶ Gold plating for contact reliability.
- ▶ 4 variations : Standard type of 5mm pitch (GC11 series).
Reverse type of 5mm pitch (GC02 series).
Standard type of 3mm pitch (GD01 series).
Reverse type of 3mm pitch (GD02 series).

ORDER CODE

GC - - **F**

① ② ③ ④

*Please order in multiples of the quantity per package.

- ① **[Type]** GC11 : Standard type GC02 : Reverse type
- ② **[Number of contacts]** 03 : 3pin 04 : 4pin 05 : 5pin 06 : 6pin 08 : 8pin 10 : 10pin
- ③ **[Option]** 1 : Standard type 2 : Reverse type
- ④ **[RoHS]** F : RoHS compliant

ORDER CODE

GD - - **1** **F**

① ② ③ ④

*Please order in multiples of the quantity per package.

- ① **[Type]** GD01 : Standard type GD02 : Reverse type
- ② **[Number of contacts]** 04 : 4pin 05 : 5pin 06 : 6pin 08 : 8pin 10 : 10pin
- ③ **[Option]** 1
- ④ **[RoHS]** F : RoHS compliant

SPECIFICATIONS

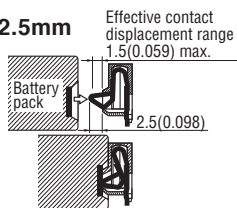
Material and plating		Electrical Characteristics	
Insulator material	Glass-filled Modified polyamide 6T (UL 94V-0), Black	Current rating	[GC series] 5A DC per contact(2contacts max.) [GD series] 5A DC per contact(2contacts only at both ends)
Contact material	Copper alloy	Current voltage	30V DC
Contact plating	[GC series] (Contact area) Gold over Nickel (Terminal area) Tin copper over Nickel [GD series] Gold over Nickel	Contact resistance	30mΩ max.
		Dielectric withstanding voltage	650V AC for 1 minute
		Insulation resistance	500MΩ min. at 500V DC
		Total contact force	[GC series] 2.254N×No.of contacts max. [GD series] 1.96N ×No.of contacts max.
		Operating temperature	-55°C to +85°C

*Specification for Battery electrode:Material ; Nickel GC series (Finish):Nickel plating 2-4 μm Nickel GD series (Finish):Gold plating 0.3 μm Nickel plating 2-4 μm

CHARACTERISTICS

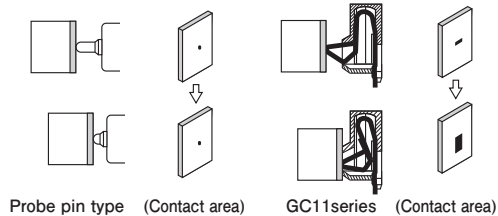
◆ Stroke Displacement 2.5mm

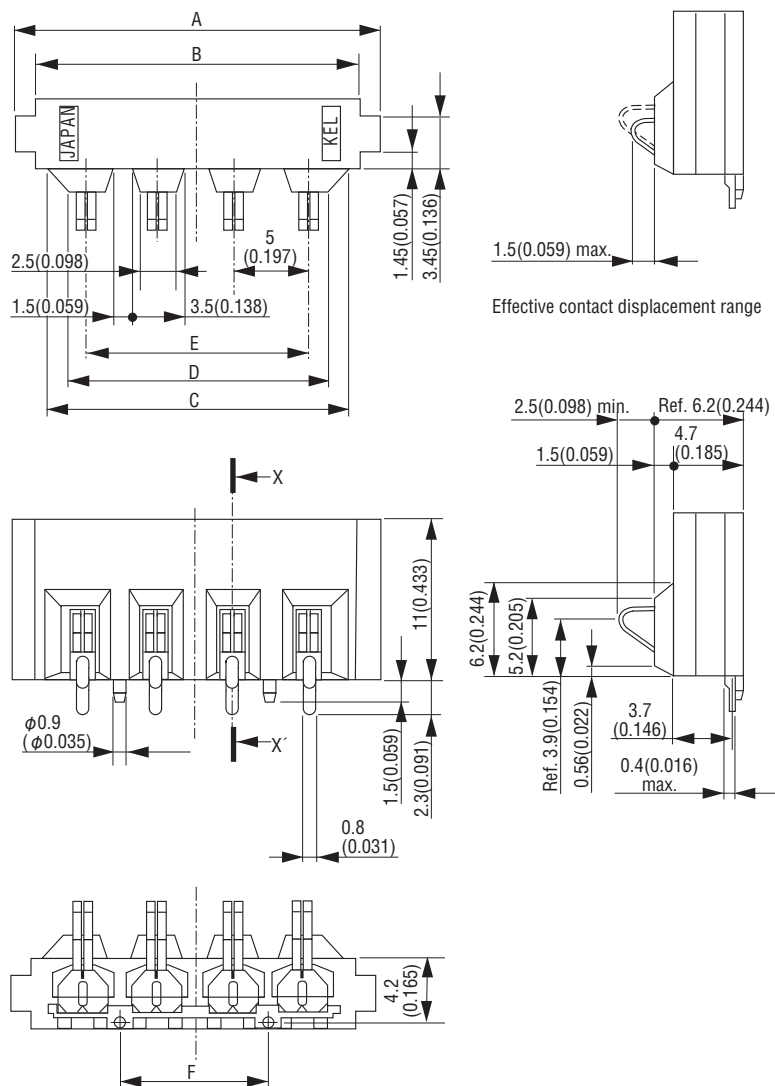
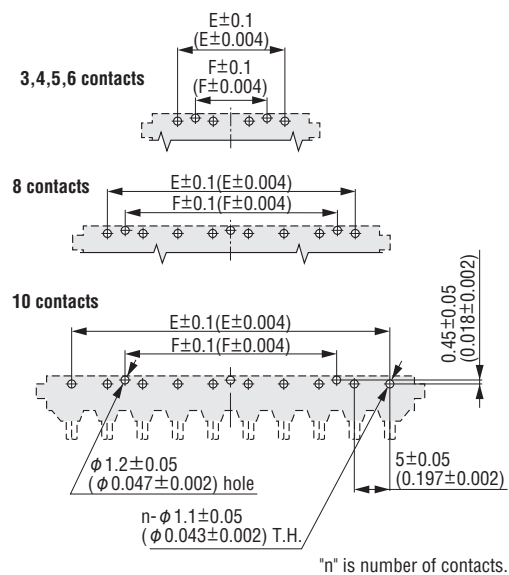
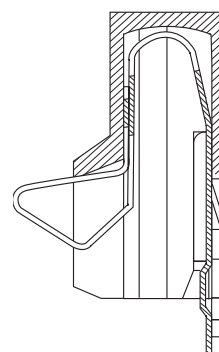
- Contact adjusts to variations in battery pack position.
- Effective contact displacement is 1.5(0.059) max.



◆ Wiping Effectiveness

- Probe pin construction does not provide a wiping mechanism which must be provided separately. As shown on the right, GC/GD series contacts wipe the battery pack terminals.



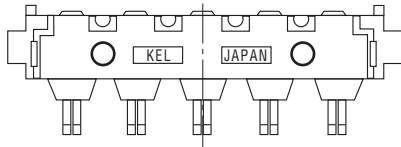
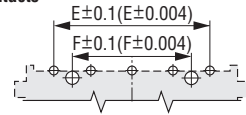
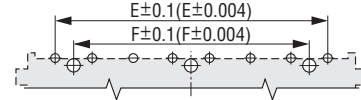
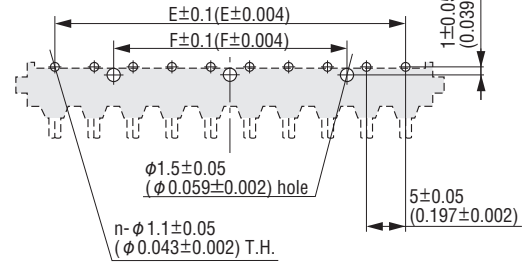

Printed Circuit Board Layout (Component Side View)

X-X' Cross Section


Packaging style

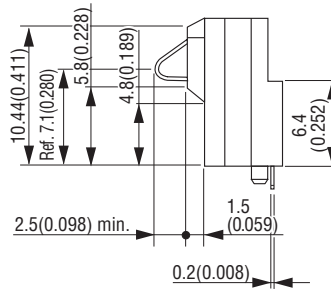
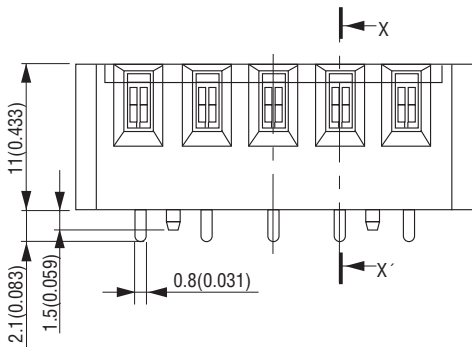
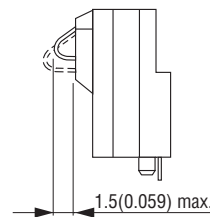
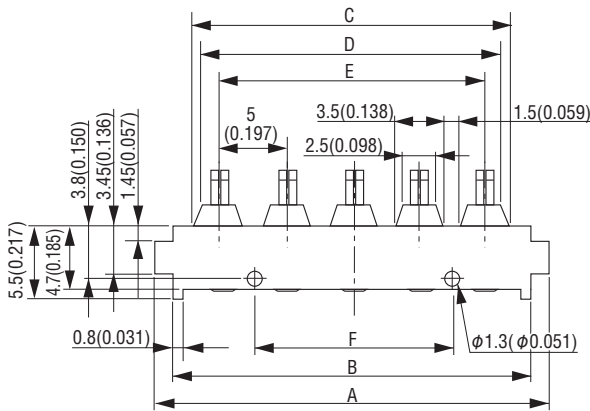
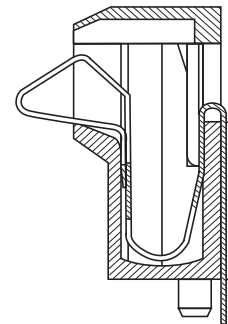
Tray

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	Number of packaging
3	GC11-03-1F	20 (0.787)	17 (0.669)	15.6 (0.614)	13.4 (0.527)	10 (0.394)	5 (0.197)	50
4	GC11-04-1F	25 (0.984)	22 (0.866)	20.6 (0.811)	18.4 (0.724)	15 (0.591)	10 (0.394)	50
5	GC11-05-1F	30 (1.181)	27 (1.063)	25.6 (1.008)	23.4 (0.921)	20 (0.787)	15 (0.591)	50
6	GC11-06-1F	35 (1.378)	32 (1.260)	30.6 (1.205)	28.4 (1.118)	25 (0.984)	20 (0.787)	25
8	GC11-08-1F	45 (1.772)	42 (1.654)	40.6 (1.598)	38.4 (1.512)	35 (1.378)	30 (1.181)	25
10	GC11-10-1F	55 (2.165)	52 (2.047)	50.6 (1.992)	48.4 (1.906)	45 (1.772)	30 (1.181)	25


Printed Circuit Board Layout (Component Side View)
3,4,5,6 contacts

8 contacts

10 contacts


"n" is number of contacts.


X-X' Cross Section


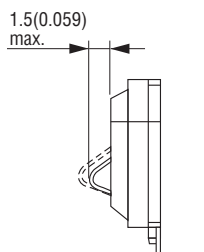
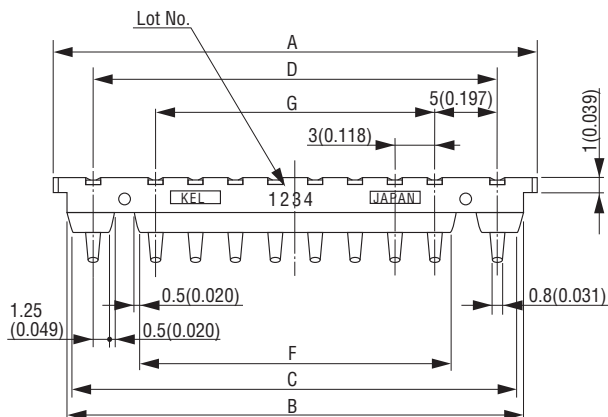
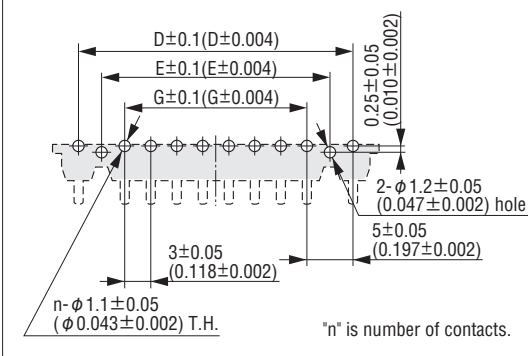
Effective contact displacement ran

Packaging style

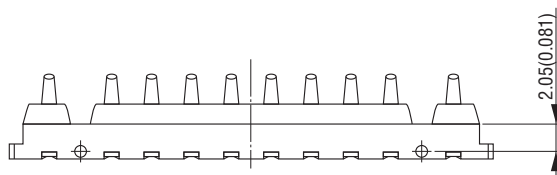
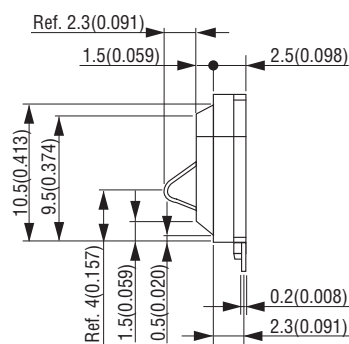
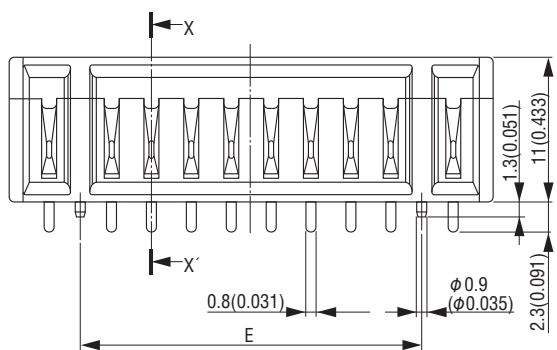
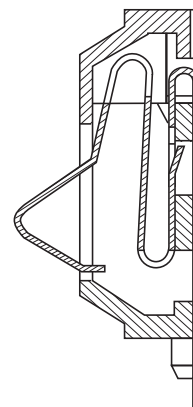
Tray

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	Number of packaging
3	GC02-03-2F	20 (0.787)	17 (0.669)	13.5 (0.531)	12.5 (0.492)	10 (0.394)	5 (0.197)	75
4	GC02-04-2F	25 (0.984)	22 (0.866)	18.5 (0.728)	17.5 (0.689)	15 (0.591)	10 (0.394)	65
5	GC02-05-2F	30 (1.181)	27 (1.063)	23.5 (0.925)	22.5 (0.886)	20 (0.787)	15 (0.591)	50
6	GC02-06-2F	35 (1.378)	32 (1.260)	28.5 (1.122)	27.5 (1.083)	25 (0.984)	20 (0.787)	39
8	GC02-08-2F	45 (1.772)	42 (1.654)	38.5 (1.516)	37.5 (1.476)	35 (1.378)	30 (1.181)	25
10	GC02-10-2F	55 (2.165)	52 (2.047)	48.5 (1.909)	47.5 (1.870)	45 (1.772)	30 (1.181)	25

▶ Printed Circuit Board Layout (Component Side View)


Effective contact displacement range

X-X' Cross Section


Packaging style

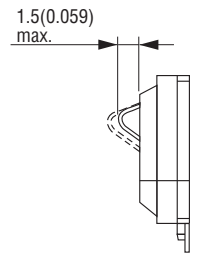
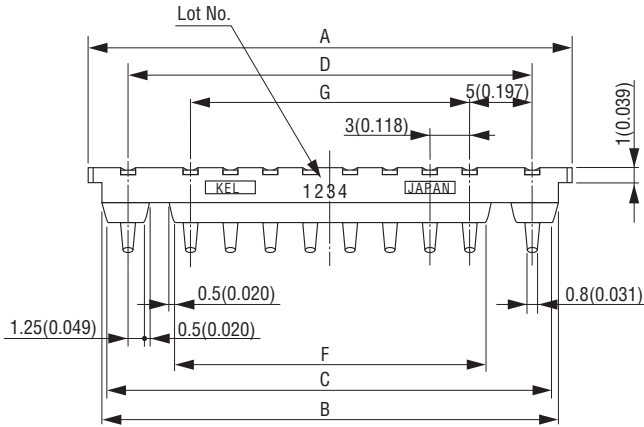
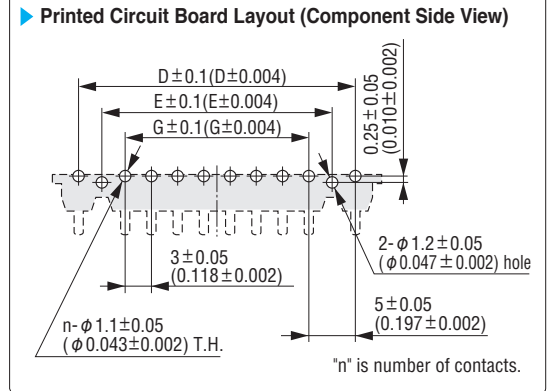
Tray

▶ Product Table / Dimensions

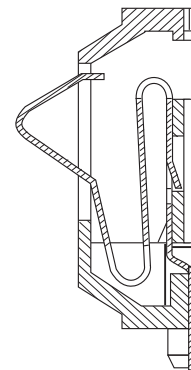
No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
4	GD01-04-1F	19 (0.748)	17 (0.669)	16 (0.630)	13 (0.512)	8 (0.315)	5.5 (0.217)	3 (0.118)	90
5	GD01-05-1F	22 (0.866)	20 (0.787)	19 (0.748)	16 (0.630)	11 (0.433)	8.5 (0.335)	6 (0.236)	80
6	GD01-06-1F	25 (0.984)	23 (0.906)	22 (0.866)	19 (0.748)	14 (0.551)	11.5 (0.453)	9 (0.354)	70
8	GD01-08-1F	31 (1.220)	29 (1.142)	28 (1.102)	25 (0.984)	20 (0.787)	17.5 (0.689)	15 (0.591)	60
10	GD01-10-1F	37 (1.457)	35 (1.378)	34 (1.339)	31 (1.220)	26 (1.024)	23.5 (0.925)	21 (0.827)	50

GD02-□□-1F (3mm pitch battery connector, Reverse type)

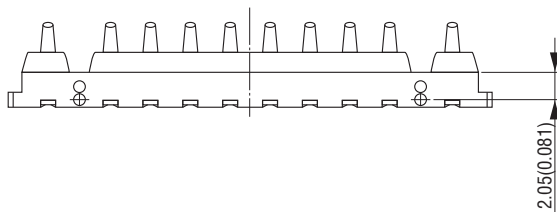
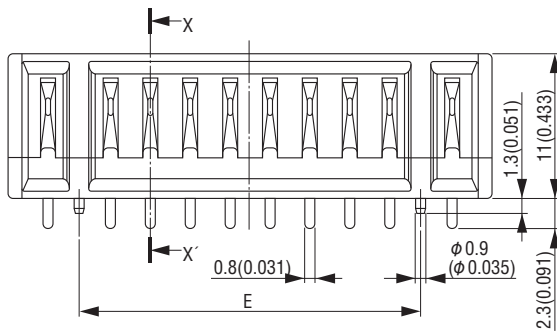
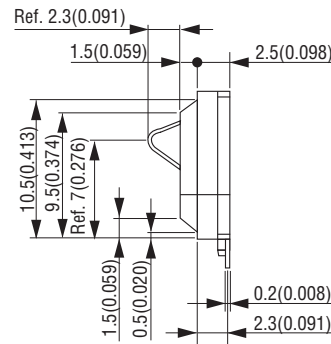
Unit : mm (inch)



X-X' Cross Section



Effective contact displacement range



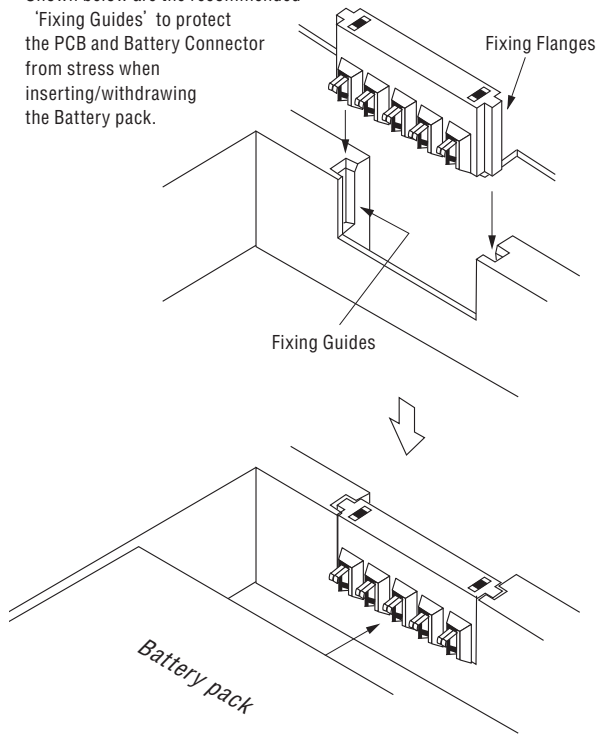
Packaging style
Tray

▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
4	GD02-04-1F	19 (0.748)	17 (0.669)	16 (0.630)	13 (0.512)	8 (0.315)	5.5 (0.217)	3 (0.118)	90
5	GD02-05-1F	22 (0.866)	20 (0.787)	19 (0.748)	16 (0.630)	11 (0.433)	8.5 (0.335)	6 (0.236)	80
6	GD02-06-1F	25 (0.984)	23 (0.906)	22 (0.866)	19 (0.748)	14 (0.551)	11.5 (0.453)	9 (0.354)	70
8	GD02-08-1F	31 (1.220)	29 (1.142)	28 (1.102)	25 (0.984)	20 (0.787)	17.5 (0.689)	15 (0.591)	60
10	GD02-10-1F	37 (1.457)	35 (1.378)	34 (1.339)	31 (1.220)	26 (1.024)	23.5 (0.925)	21 (0.827)	50

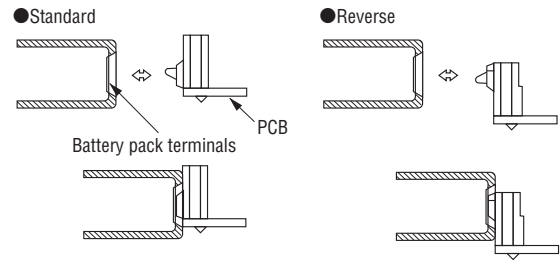
Fixing Method

Note:
Shown below are the recommended 'Fixing Guides' to protect the PCB and Battery Connector from stress when inserting/withdrawing the Battery pack.

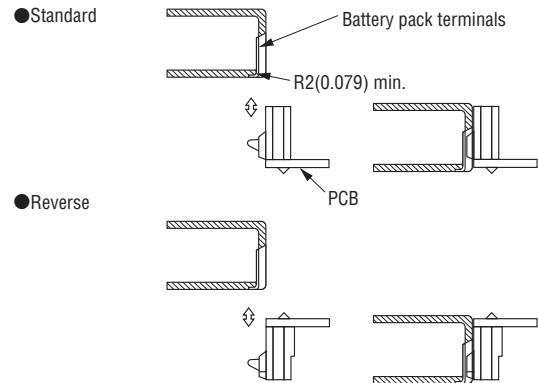


Directions For Battery Pack Insertion/Removal

Horizontal



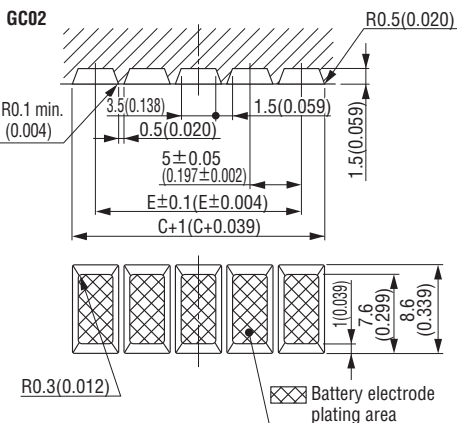
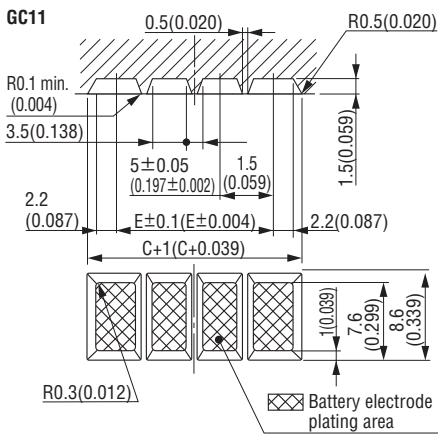
Vertical



Recommended Dimensions for Battery Terminals

Unit : mm(inch)

GC Series



GD Series

