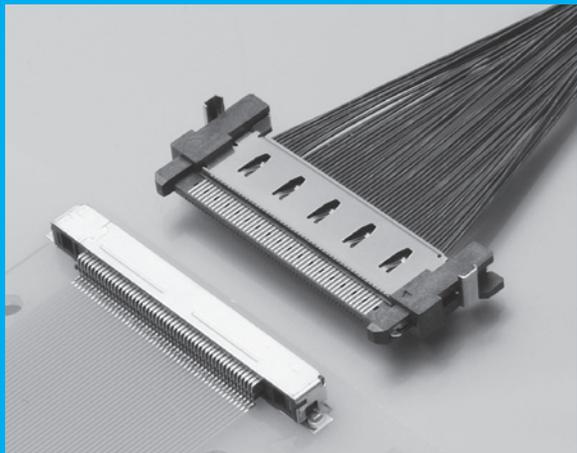


# TMC SERIES

RoHS  
Compliant

0.5mm PITCH CONNECTOR FOR MICRO COAXIAL CABLE / FOR HIGH-SPEED DIFFERENTIAL TRANSMISSION



## FEATURES

- ▶ Applied for high speed differential transmission.(TMDS, LVDS)
- ▶ Provided with a soldered cable connection.
- ▶ For micro coaxial cable(#40 AWG).
- ▶ Equipped with a metal shell, noise reduction and product strength are ensured.
- ▶ Multiple ground terminals are provided for enhanced transmission characteristics and EMS protection.
- ▶ Highly reliable design with effective mating length of 1.0mm(0.039").
- ▶ Provided with a locking mechanism for secure locking and easy insertion/release.

\*Additional common ground bar can be applied to provide a more stabilized transmission characteristic. Please contact your local KEL sales office.

## ORDER CODE

**TMC01-51**    

①      ②      ③      ④

\*Please order in multiples of the quantity per package.

- ① **[Type] TMC01** : Receptacle (PCB side connector)
- ② **[Number of contacts] 51** : 51 pin
- ③ **[Contact tail style] L** : Right angle **S** : Straight
- ④ **[Number of packing] A** : 500pcs./1 reel **B** : 1000pcs./1 reel

## ORDER CODE

**TMC21-51-1**

①      ②      ③

\*Please order in multiples of the quantity per package.

- ① **[Type] TMC21** : Plug (cable side connector)
- ② **[Number of contacts] 51** : 51 pin
- ③ **[Lock style] 1**

\*Plug (cable side connector) is composed of base and shell.

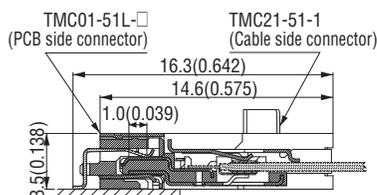
## SPECIFICATIONS

| Material and plating      |   | Electrical Characteristics      |                              |
|---------------------------|---|---------------------------------|------------------------------|
| Insulator material        | Glass-filled LCP(UL94V-0),Black           | Current rating                  | 0.3A per contact             |
| Contact material          | Copper alloy                              | Contact resistance              | 50mΩ max.                    |
| Contact plating           | Gold over Nickel                          | Dielectric withstanding voltage | 200V AC for 1minute          |
| Shell material            | [TMC01/TMC21BASE] Copper alloy            | Insulation resistance           | 100MΩ min. at 250V DC        |
| Shell plating             | [TMC01/TMC21BASE] Pure Tin over Nickel    | Operating temperature           | -40°C to +85°C               |
| Plug upper shell material | [TMC21COVER] Stainless steel (No plating) | Recommended cable               | #40 AWG Micro coaxial cables |
| Adsorption tape material  | [TMC01 S type] Polyimide                  |                                 |                              |

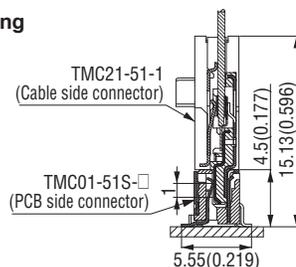
## Mating Drawing

Unit : mm(inch)

### Horizontal Mating

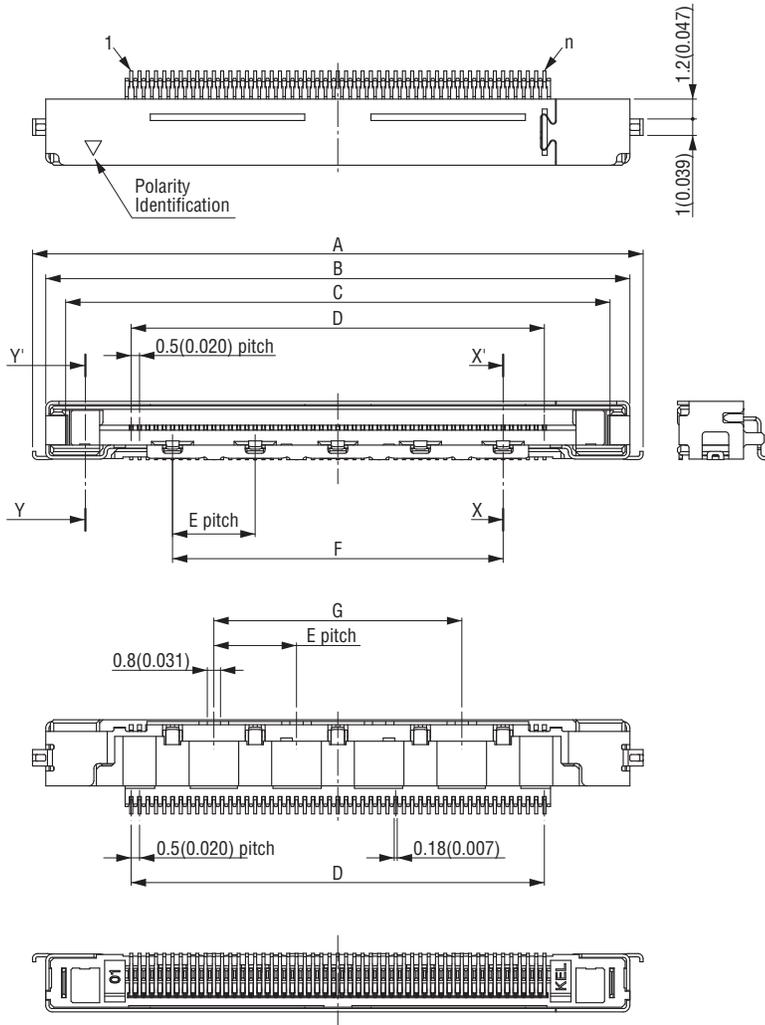
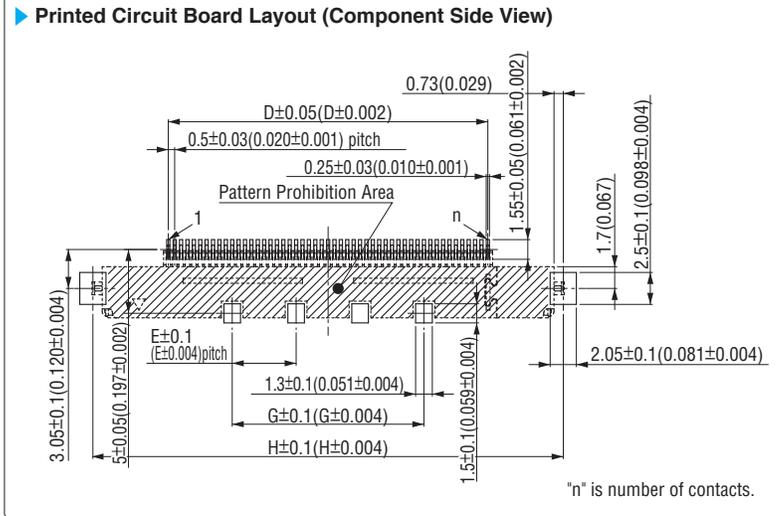


### Vertical Mating



# TMC01-51L-□ (Receptacle, PCB side connector, Right angle)

Unit : mm(inch)



▶ Ground Installation

| No. of contacts | No. of ground |
|-----------------|---------------|
| 51              | 6             |

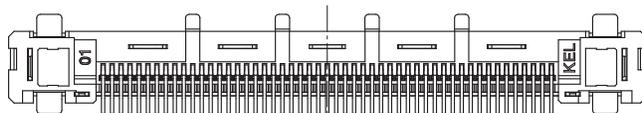
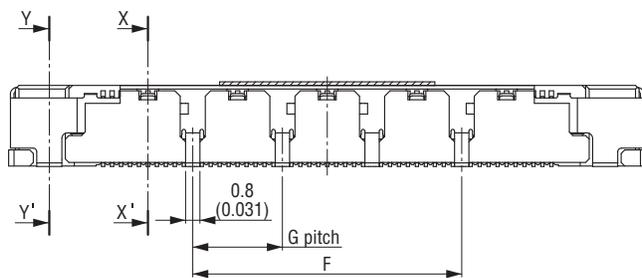
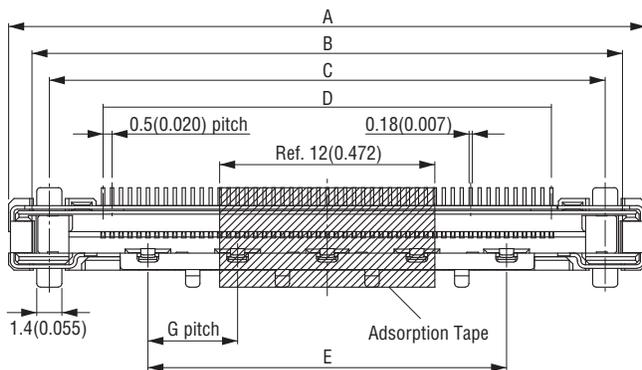
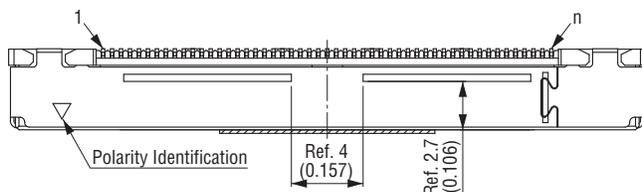
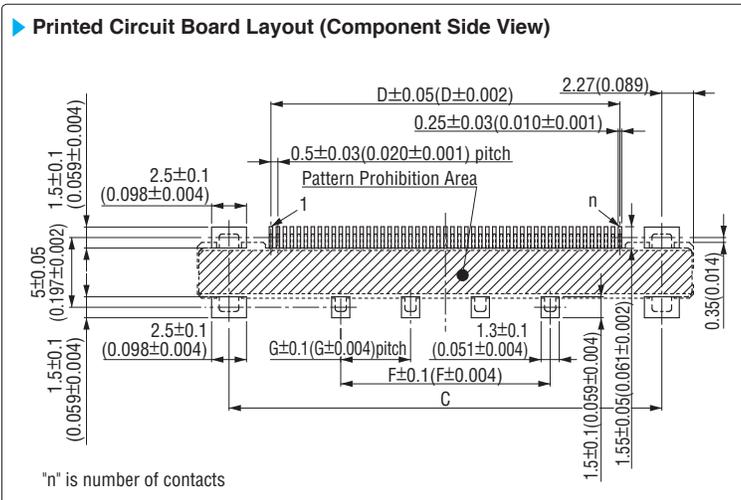
Packaging style  
Embossed tape

▶ Product Table

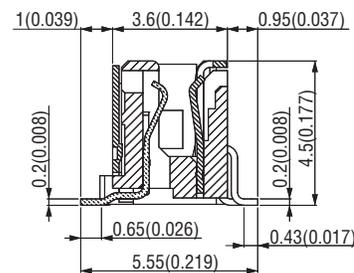
| Part Number | Number of packaging |
|-------------|---------------------|
| TMC01-51L-A | 500                 |
| TMC01-51L-B | 1,000               |

▶ Product Table / Dimensions

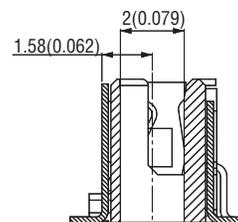
| No. of contacts | Part Number | A                | B                | C                | D             | E            | F             | G             | H               |
|-----------------|-------------|------------------|------------------|------------------|---------------|--------------|---------------|---------------|-----------------|
| 51              | TMC01-51L-□ | 36.94<br>(1.454) | 35.34<br>(1.391) | 32.94<br>(1.297) | 25<br>(0.984) | 5<br>(0.197) | 20<br>(0.787) | 15<br>(0.591) | 36.8<br>(1.449) |



**X-X' Cross Section**



**Y-Y' Cross Section**



▶ **Ground Installation**

| No. of contacts | No. of ground |
|-----------------|---------------|
| 51              | 6             |

Packaging style

Embossed tape

▶ **Product Table**

| Part Number | Number of packaging |
|-------------|---------------------|
| TMC01-51S-A | 500                 |
| TMC01-51S-B | 1,000               |

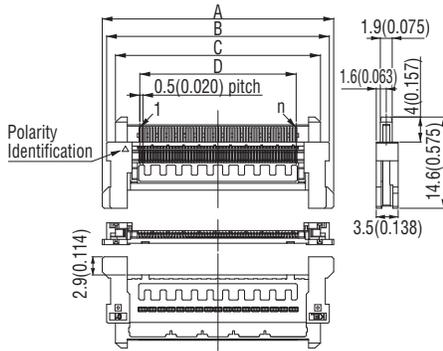
▶ **Product Table / Dimensions**

| No. of contacts | Part Number | A                | B                | C             | D             | E             | F             | G            |
|-----------------|-------------|------------------|------------------|---------------|---------------|---------------|---------------|--------------|
| 51              | TMC01-51S-□ | 35.54<br>(1.399) | 32.94<br>(1.297) | 31<br>(1.220) | 25<br>(0.984) | 20<br>(0.787) | 15<br>(0.591) | 5<br>(0.197) |

# TMC21-51-1 (Plug, Cable side connector)

Unit : mm(inch)

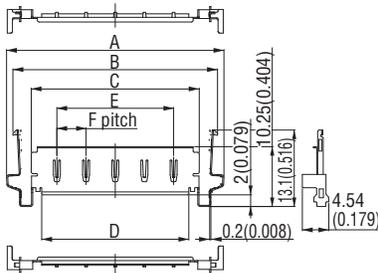
## TMC21-51 BASE



### Product Table

| A             | B               | C                | D             |
|---------------|-----------------|------------------|---------------|
| 37<br>(1.457) | 35.6<br>(1.402) | 32.78<br>(1.291) | 25<br>(0.984) |

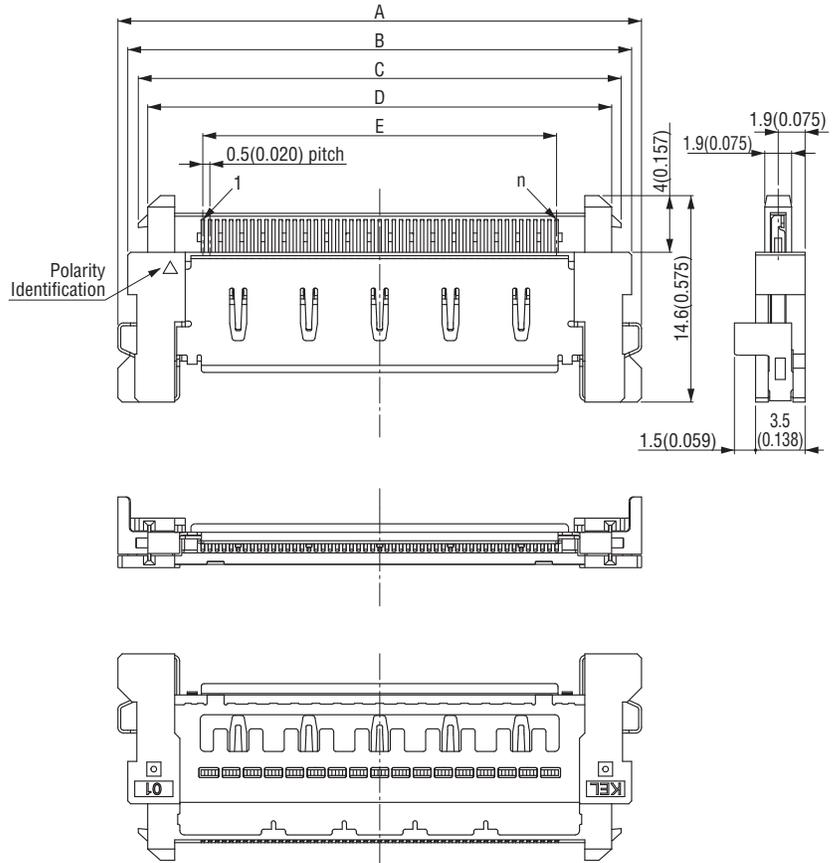
## TMC21-51SHELLP2-1



### Product Table

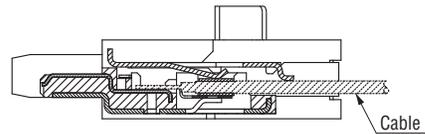
| A                | B                | C                | D               | E               | F            |
|------------------|------------------|------------------|-----------------|-----------------|--------------|
| 37.24<br>(1.466) | 35.06<br>(1.380) | 28.78<br>(1.133) | 25.2<br>(0.992) | 20.5<br>(0.807) | 5<br>(0.197) |

\*TMC21-51 BASE and TMC21-51SHELLP2 are component parts of TMC21-51-1.



"n" is number of contacts

### X-X' Cross Section



### Product Table / Dimensions

| No. of contacts | Part Number | A             | B               | C                | D                | E             | Number of packaging |
|-----------------|-------------|---------------|-----------------|------------------|------------------|---------------|---------------------|
| 51              | TMC21-51-1  | 37<br>(1.457) | 35.6<br>(1.402) | 34.12<br>(1.343) | 32.78<br>(1.291) | 25<br>(0.984) | 60                  |

Packaging style

Tray