

**Specifications**

**Material**

Housing: PA66, UL 94V-0, Black  
 Shell: Brass  
 Terminal: Phosphor Bronze

**Plating**

Terminal:  
 Contact Area: 50µ" Gold  
 Solder Tails: Tin  
 Shell: Nickel

**Mechanical & Environmental**

Storage Temperature: -40°C to +85°C  
 Operation Temperature: -40°C to +85°C  
 Durability: 750 Cycles min.  
 Mating Force: 23N max.

**Ordering Grid**

MG**BB05** — **2** **K** **C2** **B001** **H** Request Samples and Quotation

Contact Plating  
 K = 50µ" Gold

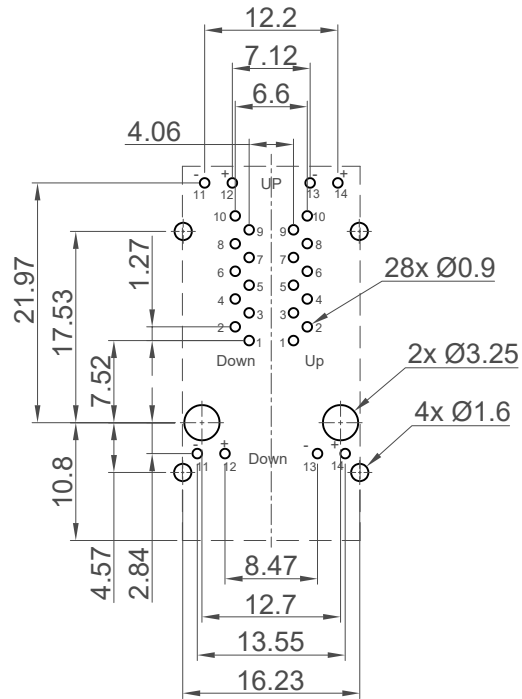
Packing Options  
 H = Tray (42pcs per tray)

Part Number		Product Description	
MGBB05		Modular Jack, With Shell, With LED, With Magnetics, R/A, Through Hole, 2x1 Ports, 1000Base	
Drawing Date		17th October 2025	
By	KY	Tolerances (Except as Noted)	Units: Metric (mm)
Detail	Drawing Release	Length: X. ±0.35 X.X ±0.30 X.XX ±0.25 X.XXX ±0.10	Angle: X° ±3.0° X.X° ±2.0° X.XX° ±1.5° X.XXX° ±1.0°
Revision	A	3rd Angle Projection	
Date	17/10/25		

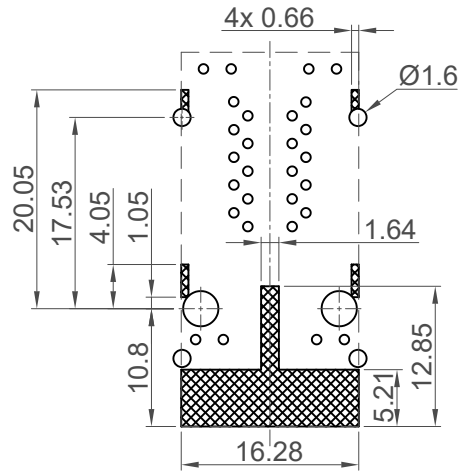


This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE

Not to Scale	Drawn By CC	Sheet No. 1/4
--------------	-------------	---------------

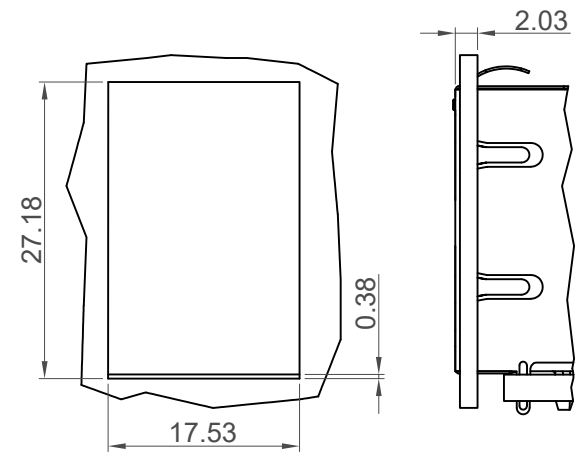


**Recommended PCB Layout**  
Viewed from Component Side  
Tolerance:±0.05mm  
□ Component Outline








**Recommended Keep Out Area**  
Viewed from Component Side  
Tolerance:±0.05mm

▨ Keep Out Area □ Component Outline

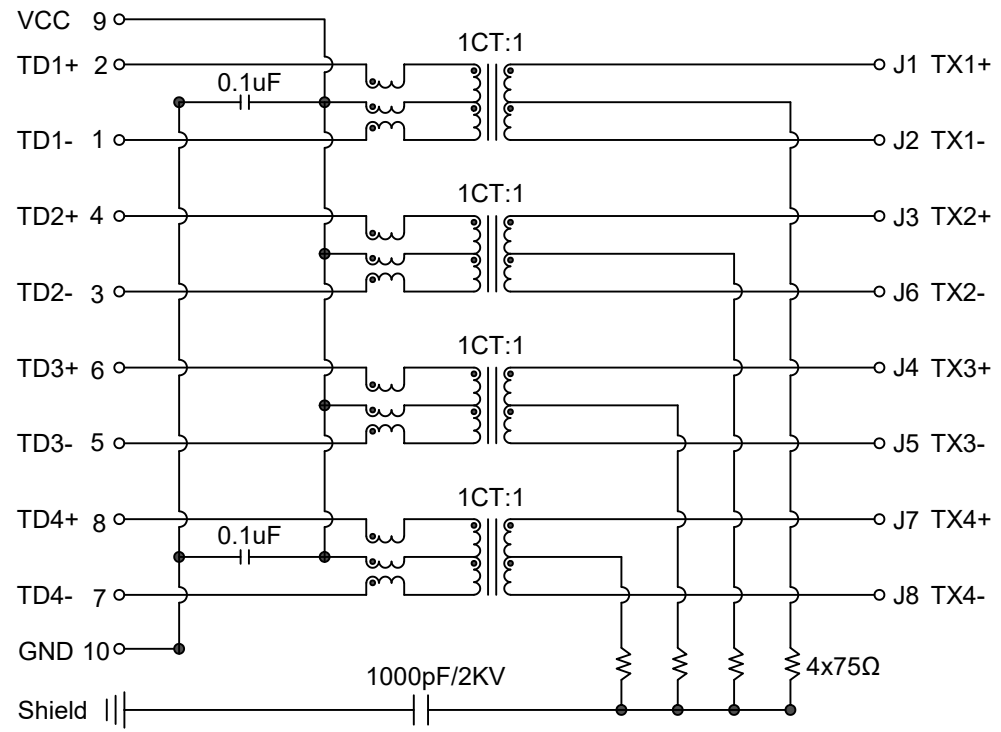


**Recommended Panel Cut Out**  
Tolerance:±0.10mm

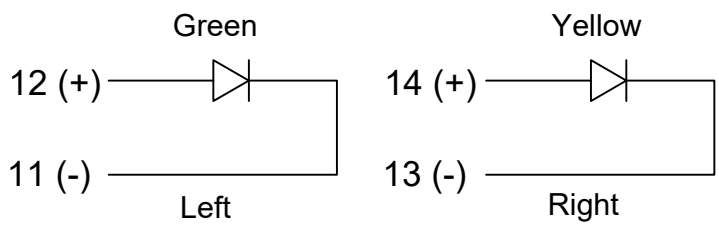
Part Number		Product Description		 <a href="http://www.gct.co">www.gct.co</a>
MGBB05		Modular Jack, With Shell, With LED, With Magnetics, R/A, Through Hole, 2x1 Ports, 1000Base		
Drawing Date		17th October 2025		
By		KY		
Detail	Drawing Release	Tolerances (Except as Noted)		Units: Metric (mm)
		Length	Angle	
Revision	Date	X.±0.35	X° ±3.0°	
		X.X ±0.30	X.X° ±2.0°	
Date	17/10/25	X.XX ±0.25	X.XX° ±1.5°	
		X.XXX ±0.10	X.XXX° ±1.0°	
Date		17/10/25		
Date		17/10/25		
Date		17/10/25		
Date		17/10/25		
Date		17/10/25		This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE
Date		17/10/25		
Date		17/10/25		Not to Scale Drawn By CC
Date		17/10/25		
Date		17/10/25		Sheet No. 2/4
Date		17/10/25		

H  
G  
F  
E  
D  
C  
B  
A

PCB Side to PHY



Cable Side






Pin	Green	Pin	Yellow
11	-	13	-
12	+	14	+

Electrical

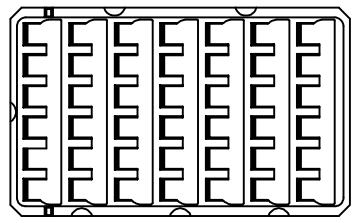
- Turn Ratio:  
 (2-1) : (J1-J2) = 1CT : 1CT (±2%)  
 (4-3) : (J3-J6) = 1CT : 1CT (±2%)  
 (6-5) : (J4-J5) = 1CT : 1CT (±2%)  
 (8-7) : (J7-J8) = 1CT : 1CT (±2%)
- OCL: 350uH min.@ 100KHz, 100mV, 8mA DC.
- Insertion Loss: 1-100MHz, -1.0dB max.  
100-125MHz, -1.2dB max.
- Return Loss: 1-40MHz, -18dB min.  
40-60MHz, -14dB min.  
60-80MHz, -12dB min.  
80-100MHz, -10dB min.
- Cross Talk: 1-100MHz, -30dB min.
- CMR: 1-100MHz, -30dB min.
- Hi-Pot: 2250V DC 60s 1mA PRI to SEC
- Speed: 10/100/1000M Base-T

LED Specification			
Standard LED Colour	Wave Length	Forward A(max)	Forward V
Green	565nm	20mA	2.2-2.4V
Yellow	590nm	20mA	2.1-2.5V

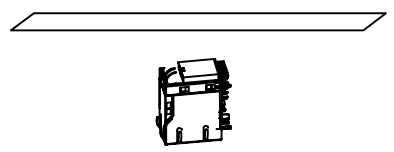
Part Number		Product Description		 <a href="http://www.gct.co">www.gct.co</a>
MGBB05		Modular Jack, With Shell, With LED, With Magnetics, R/A, Through Hole, 2x1 Ports, 1000Base		
Drawing Date		17th October 2025		
By		KY		
Detail	Release	Tolerances (Except as Noted)	Units:	 
Revision	A	Length	Metric (mm)	
Date	17/10/25	Angle		
This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE				Not to Scale Drawn By CC
				Sheet No. 3/4

1 2 3 4 5 6 7 8

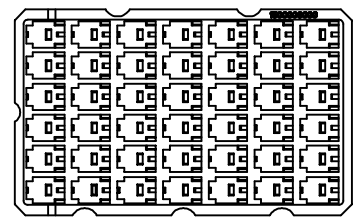
H  
G  
F  
E  
D  
C  
B  
A



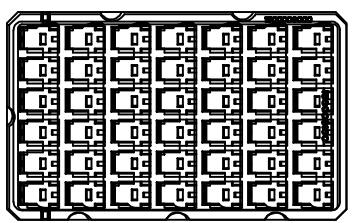
Cover



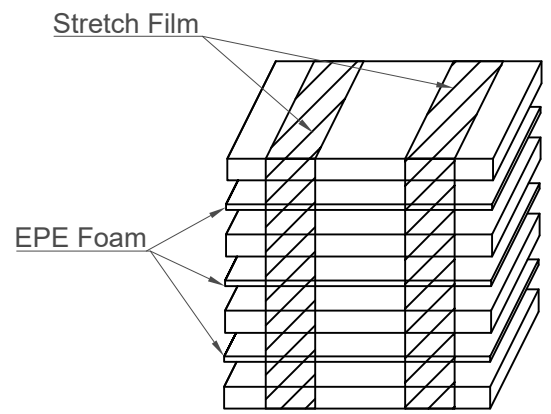
Paper



Tray

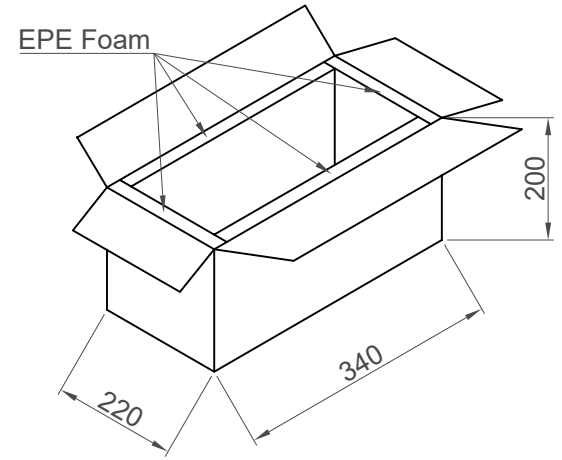


42pcs/Tray







4 Trays/ Bundle

Pcs / Tray	Trays / Carton	Total Quantity
42	4	168 pcs



168 pcs/ Carton

Part Number		Product Description		 www.gct.co
MGBB05		Modular Jack, With Shell, With LED, With Magnetics, R/A, Through Hole, 2x1 Ports, 1000Base		
Drawing Date		17th October 2025		
By	KY	Tolerances (Except as Noted)	Units:	  This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE
Detail	Drawing Release	Length	Metric (mm)	
Revision	A	Angle	 3rd Angle Projection	
Date	17/10/25			
		Not to Scale	Drawn By	Sheet No.
			CC	4/4

1 2 3 4 5 6 7 8