

THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

LED 2 & 4 POLARITY			LED 1 & 3 POLARITY		
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	COLOR
+	-	YELLOW	+	-	GREEN
-	+	YELLOW	-	+	ORANGE

PRELIMINARY

RoHS



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT
TP2	1CT : 1CT
TP3	1CT : 1CT
TP4	1CT : 1CT

INS. LOSS (MAX)

1MHz TO 20MHz	-0.8 dB
50MHz	-1.0 dB
200MHz	-1.2 dB
400MHz	-2.0 dB
500MHz	-3.0 dB

RET. LOSS (MIN) @ 100 OHMS

1MHz $\leq f \leq$ 40MHz	16 dB MIN
40MHz $< f \leq$ 400MHz	16-10LOG(f/40MHz) dB
400MHz $< f \leq$ 500MHz	6-30LOG(f/400MHz) dB

CM TO CM REJ

1MHz - 500MHz	-25 dB MIN
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CM TO DM REJ

1MHz - 500MHz	-30 dB MIN
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HIPOT (Isolation Voltage): 2250VDC

100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

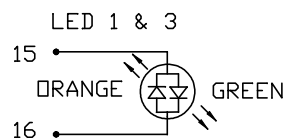
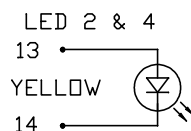
LED 2 & 4

V_F (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.
 λ D (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

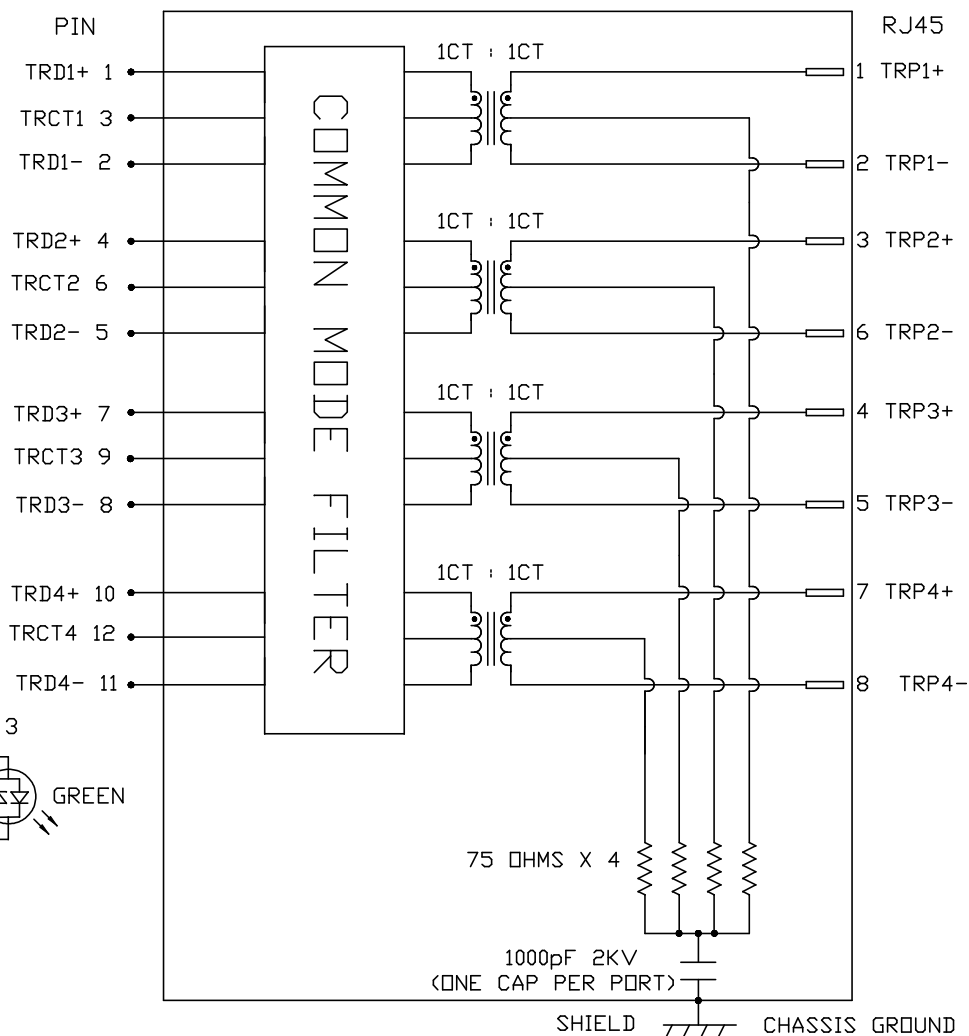
LED 1 & 3

V_F (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.
ORANGE 2.0V TYP.
 λ D (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP.
ORANGE 605nm TYP.

OPERATING TEMPERATURE: 0°C TO +70°C.



SCHEMATIC



ORIGINATED BY
CHOW WANCHUNG
DATE 2018-10-19

DRAWN BY
XIE YIMING
DATE 2018-10-19

TITLE

2X1 10 Gigabit MagJack®
PATENTED

PART NO. / DRAWING NO.
G23-21YR-010

FILE NAME
G23-21YR-010_PA.DWG

STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX	SIZE : A4

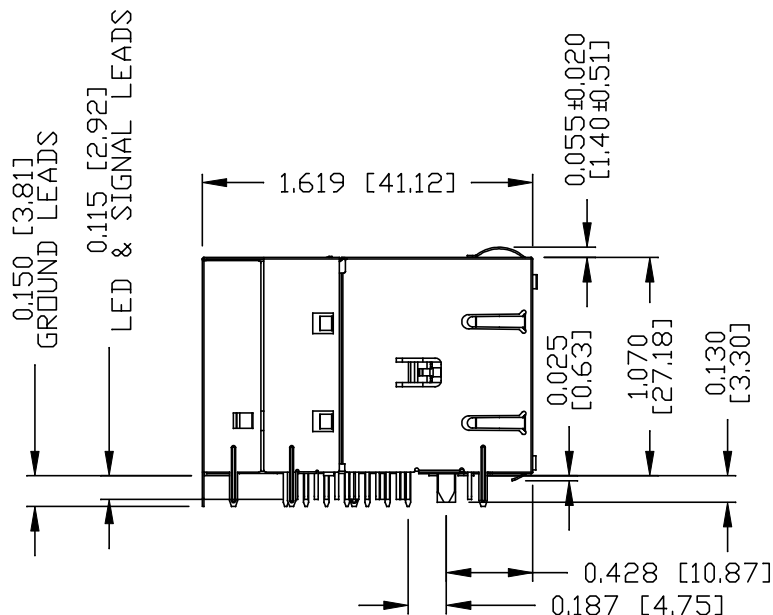
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PRELIMINARY

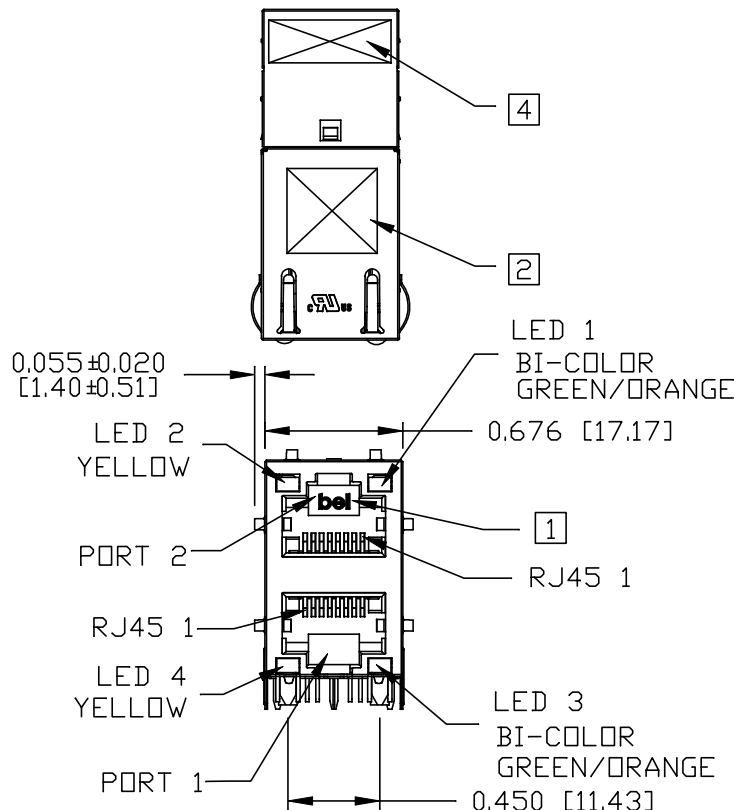
RoHS



NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK.
FLAMMABILITY RATING UL 94V-0
- CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING
OR EQUIVALENT
- OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
100 MICRO-INCH MIN MATTE TIN. PINS ARE
SOLDER DIPPED.
- METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.
(ALL GROUND LEADS ARE SOLDER DIPPED)

- [1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,
PART 68 SUBPART F.
- [2] MARK PART WITH MFG LOGO, NAME, PART NUMBER AND DATE CODE.



3. THE PRODUCT IS RoHS COMPLIANT.

UL UL RECOGNIZED - FILE #E169987.

- [4] THE PRODUCT IS PATENTED. "PATENTED" MARKING IS ON THE TOP SURFACE. THE PATENT NUMBER ARE U.S. PAT. 7,429,195 & U.S. PAT. 6,840,817 & U.S. PAT. 7,123,117 AND U.S. PAT. 7,924,130.
5. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.
6. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

ORIGINATED BY
SANDY LIN
DATE 2018-10-19

DRAWN BY
OLIVER ZHANG
DATE 2018-10-19

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TOL. IN INCH

.X
.XX
.XXX

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]
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REV. : PA

PAGE : 3



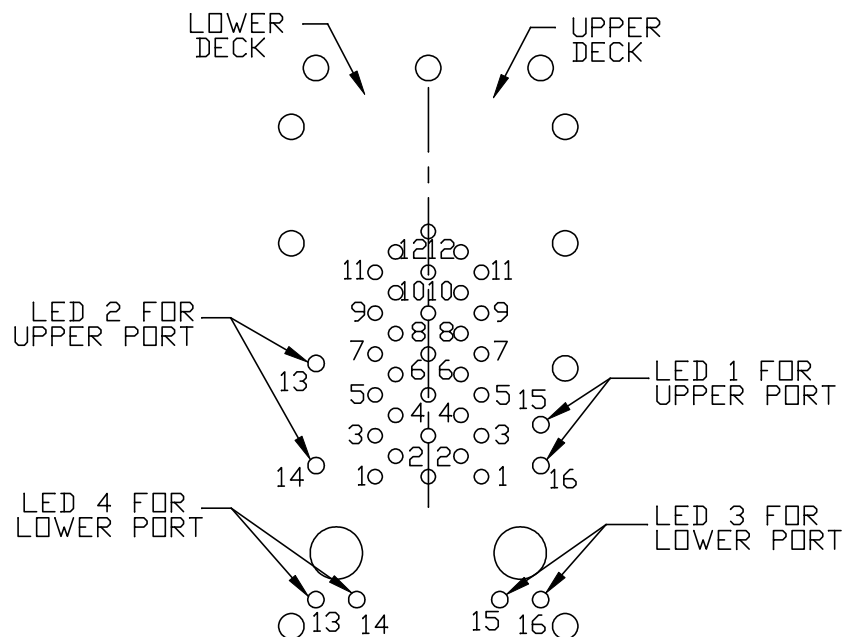
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a bel group

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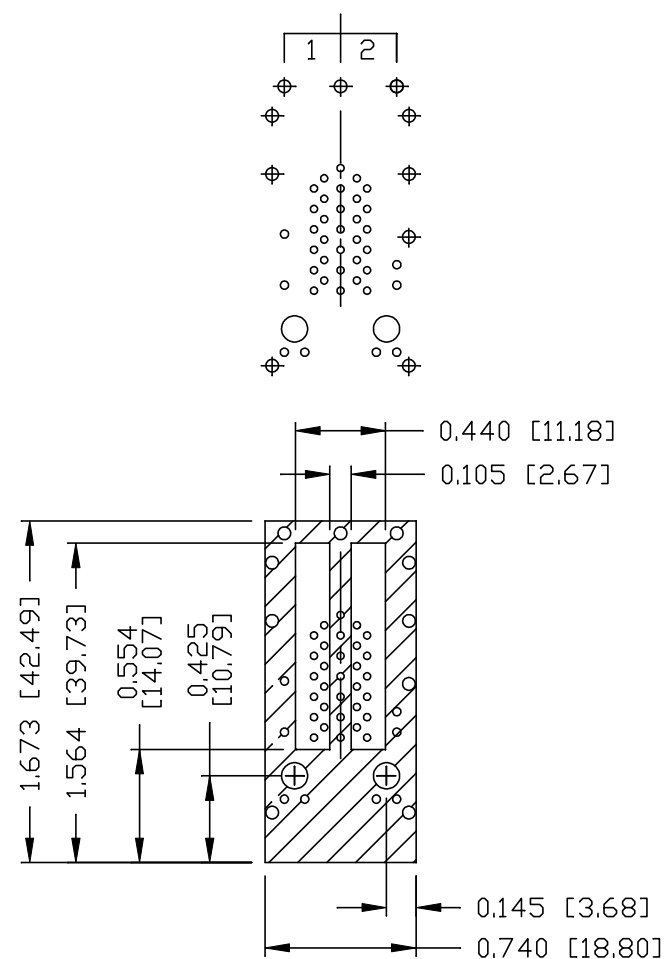
PORT ASSIGNMENT
(COMPONENT SIDE VIEW)

RoHS



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	TRD4+	16	ORANGE(+)/GREEN(-)
9	TRCT3	15	ORANGE(-)/GREEN(+)
8	TRD3-	14	YELLOW (-)
7	TRD3+	13	YELLOW (+)
6	TRCT2	12	TRCT4
5	TRD2-	11	TRD4-
4	TRD2+		
3	TRCT1		
2	TRD1-		
1	TRD1+		



THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR COMPONENT PAD.

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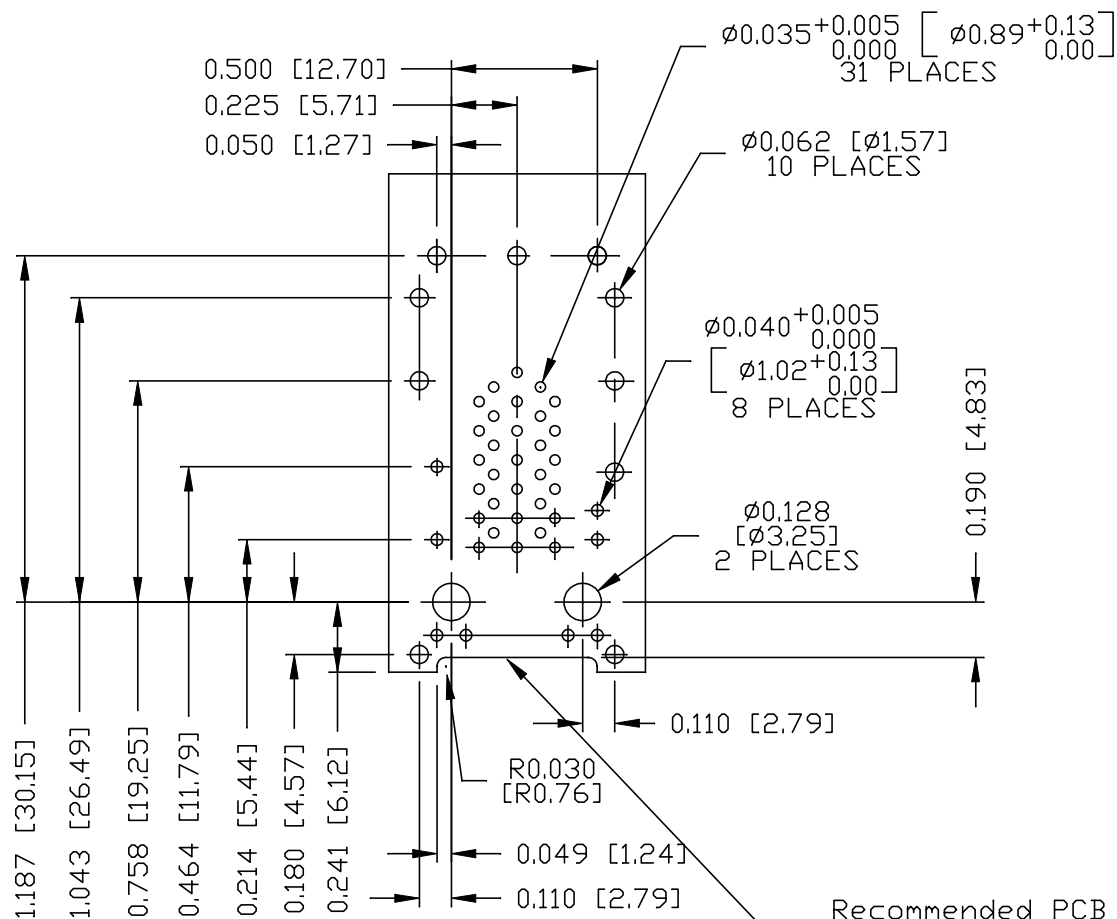
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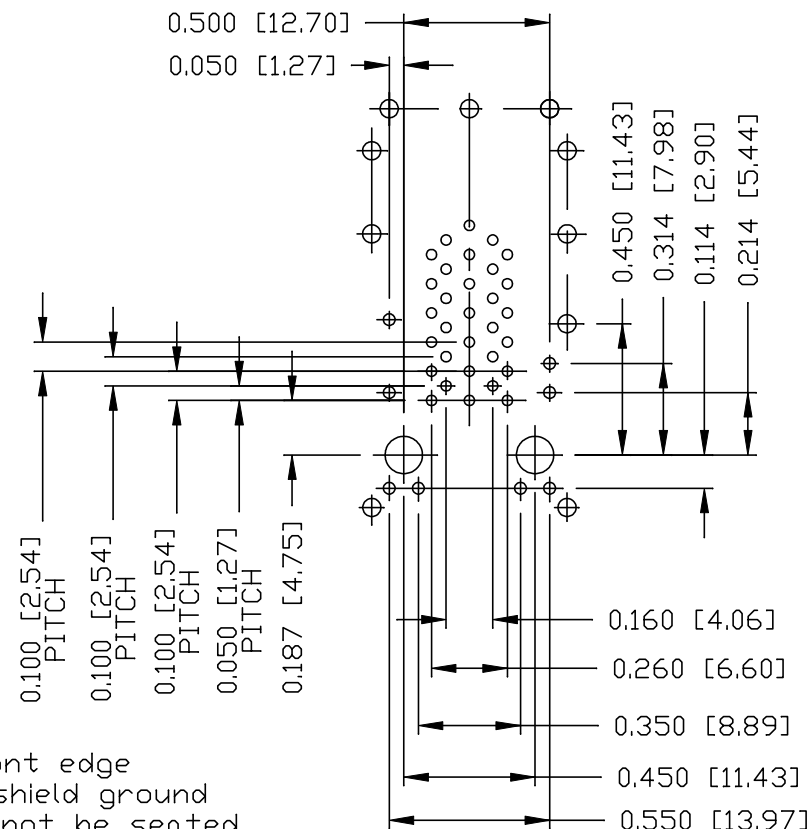
PRELIMINARY

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SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)

Recommended PCB front edge cutout. The bottom shield ground tabs (front) should not be seated on the top of the PCB.



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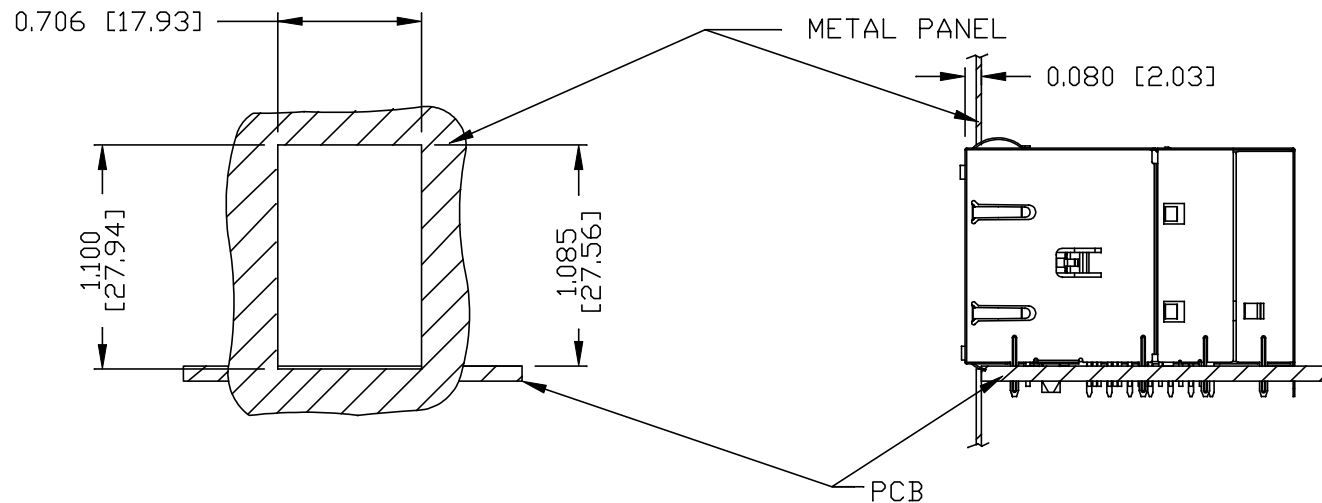


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SUGGESTED PANEL OPENING

PRELIMINARY

RoHS



NOTE:

THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION. IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.

PACKING INFORMATION

PACKING TRAY : 0200M9999-P3 (TOP)

0200M9999-P2 (BOTTOM)

PACKING QUANTITY : 18 PCS FINISHED GOODS PER TRAY.

9 TRAYS (162 PCS FINISHED GOODS) PER CARTON BOX.

REMARK : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX.

(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

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DATE 2018-10-19

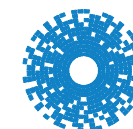
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