



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT $\pm 2\%$
TP2	1CT : 1CT $\pm 2\%$
TP3	1CT : 1CT $\pm 2\%$
TP4	1CT : 1CT $\pm 2\%$

QCL @ 100kHz/100mVRMS

8mA DC BIAS	350 μ H MIN.
-------------	------------------

INS. LOSS

0.1MHz TO 1MHz	-1.1 dB MAX
1MHz TO 65MHz	-0.5 dB MAX
65MHz TO 100MHz	-0.8 dB MAX
100MHz TO 125MHz	-1.2 dB MAX

RET. LOSS (MIN)

0.5MHz-40MHz	-18 dB
40MHz-100MHz	-12+20LOG(f/80MHz) dB

CM TO CM REJ

100kHz - 100MHz	-30 dB MIN
-----------------	------------

CM TO DM REJ

100kHz - 100MHz	-35 dB MIN
-----------------	------------

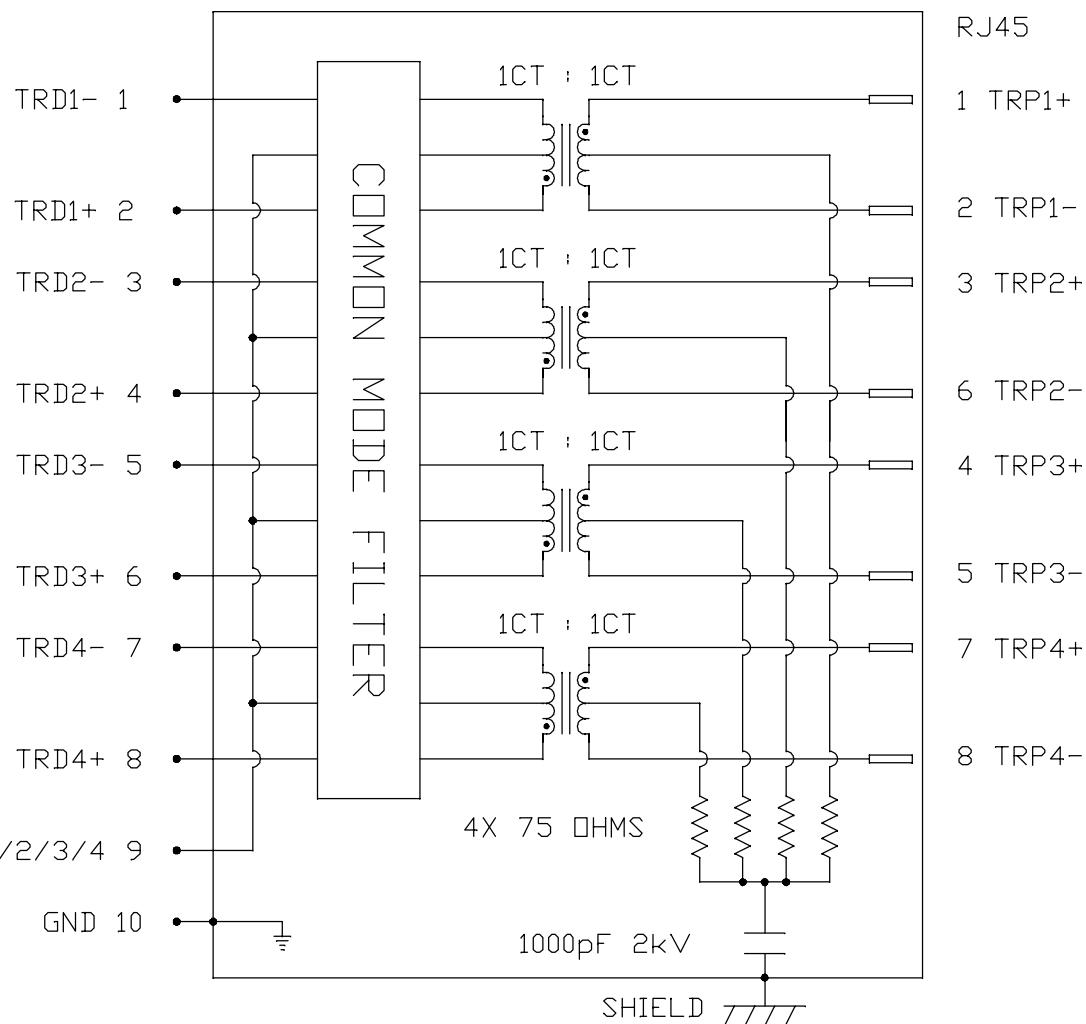
HIPOT (Isolation Voltage):

1500 Vrms or 2250VDC	GND 10
----------------------	--------

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

OPERATING TEMPERATURE: 0°C TO +70°C.

SCHEMATIC



RJ45

ORIGINATED BY
CHOW WANCHUNG
DATE 2016-11-07

DRAWN BY
LI LINFENG
DATE 2016-11-07

TITLE
2X6 gigabit MagJack®
(8 Cores)
0833-2X6R-54-F
PATENTED

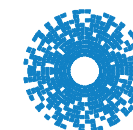
PART NO. / DRAWING NO.
08332X6R54-F

FILE NAME
08332X6R54-F_C.DWG

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

REV. : C

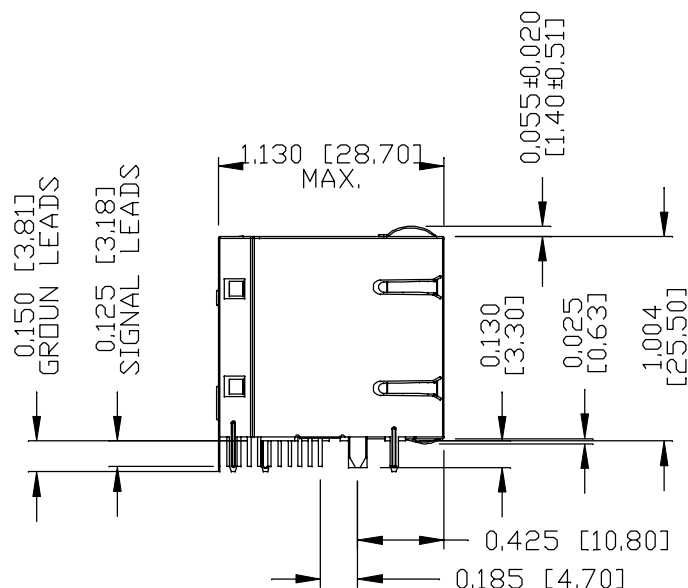
PAGE : 2



bel MAGNETIC SOLUTIONS
a bel group

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.

RoHS



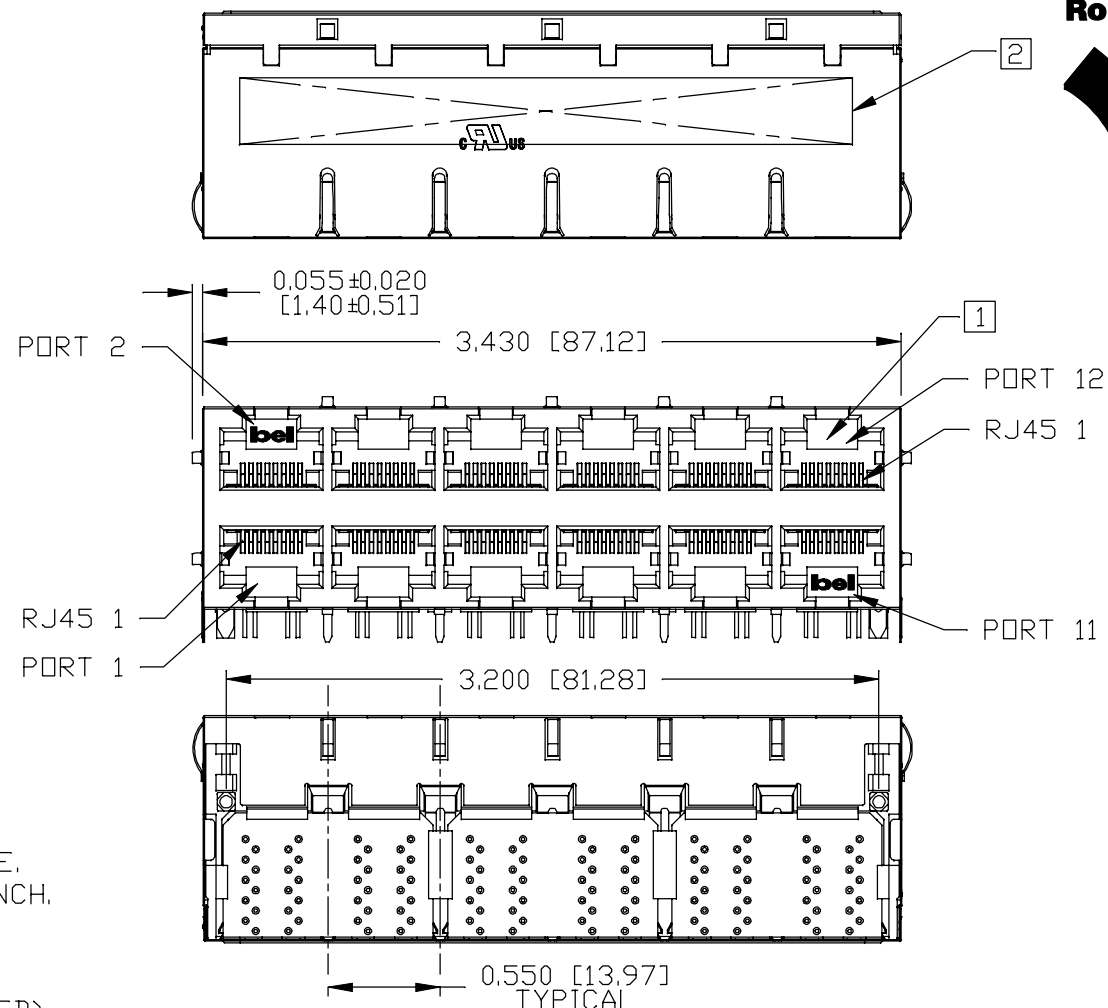
NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK
FLAMMABILITY RATING UL 94V-0
- CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.
30 MICRO-INCH MIN NICKEL UNDERPLATE.
- 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, MFG NAME, PART NUMBER, DATE CODE AND PATENTED.



UL RECOGNIZED - FILE #E196366 AND E169987.



3. THE PRODUCT IS RoHS COMPLIANT.
4. THE PRODUCT IS PATENTED. THE PATENT NUMBER ARE U.S. PAT. 6,840,817 AND U.S. PAT. 7,123,117.
5. THE PRODUCT IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX. AND 10 SECONDS MAX..

ORIGINATED BY
LI QUANKUN
DATE 2016-11-07

DRAWN BY
ZHANG XUEZHENG
DATE 2016-11-07

TITLE
2X6 gigabit MagJack®
(8 Cores)
0833-2X6R-54-F
PATENTED

PART NO. / DRAWING NO.
08332X6R54-F

FILE NAME
08332X6R54-F_C.DWG

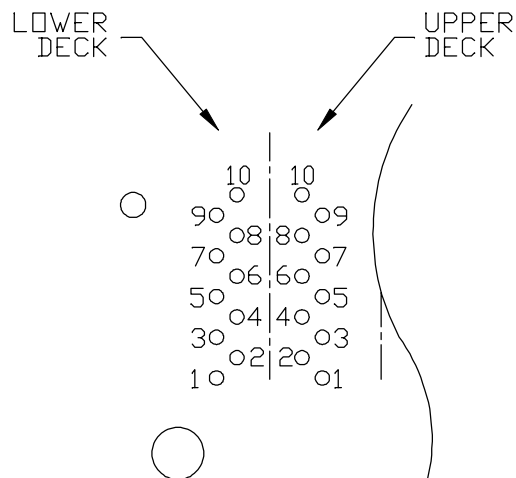
STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.
.X		
.XX		UNIT : INCH [mm]
.XXX	±0.010	SCALE : N/A
		SIZE : A4

REV. : C	PAGE : 3
----------	----------

MAGNETIC SOLUTIONS
a bel group

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.

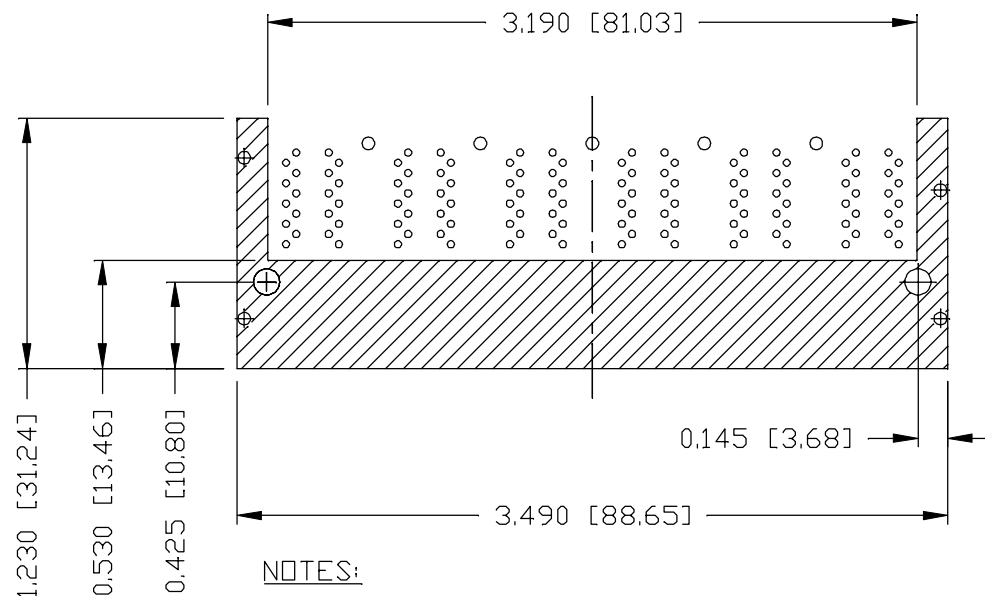
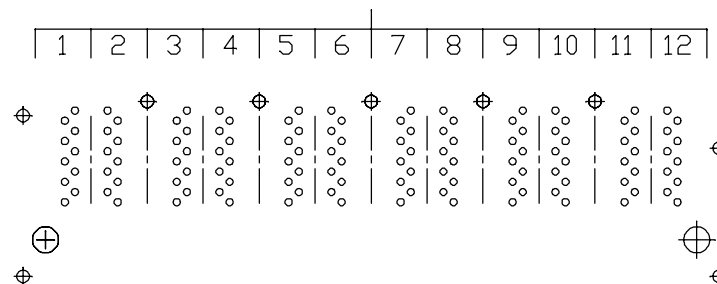
RoHS



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	GND
9	TRCT1/2/3/4
8	TRD 4+
7	TRD 4-
6	TRD 3+
5	TRD 3-
4	TRD 2+
3	TRD 2-
2	TRD 1+
1	TRD 1-

PORT ASSIGNMENT
(COMPONENT SIDE VIEW)



NOTES:

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

REV. : C

PAGE : 4

ORIGINATED BY
LI QUANKUN
DATE 2016-11-07

DRAWN BY
ZHANG XUEZHENG
DATE 2016-11-07

TITLE
2X6 gigabit MagJack®
(8 Cores)
0833-2X6R-54-F
PATENTED

PART NO. / DRAWING NO.
08332X6R54-F

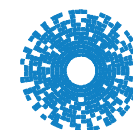
FILE NAME
08332X6R54-F_C.DWG

STANDARD DIM.
TOL. IN INCH

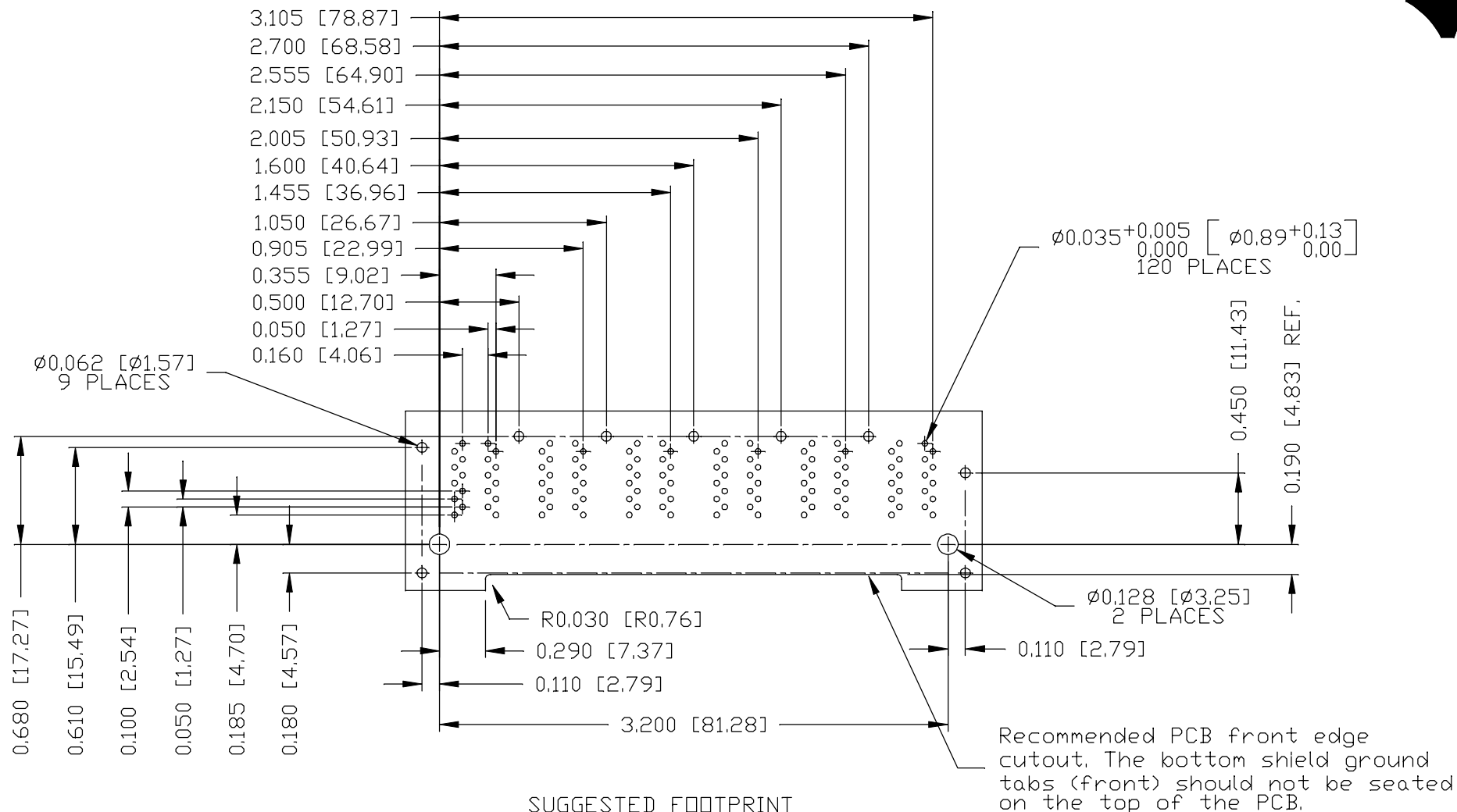
.X
.XX
.XXX

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]
SCALE : N/A
SIZE : A4



bel MAGNETIC
SOLUTIONS
a bel group



SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)

ORIGINATED BY
LI QUANKUN
DATE 2016-11-07
DRAWN BY
ZHANG XUEZHENG
DATE 2016-11-07

TITLE
2X6 gigabit MagJack®
(8 Cores)
0833-2X6R-54-F
PATENTED

PART NO. / DRAWING NO.
08332X6R54-F
FILE NAME
08332X6R54-F_C.DWG

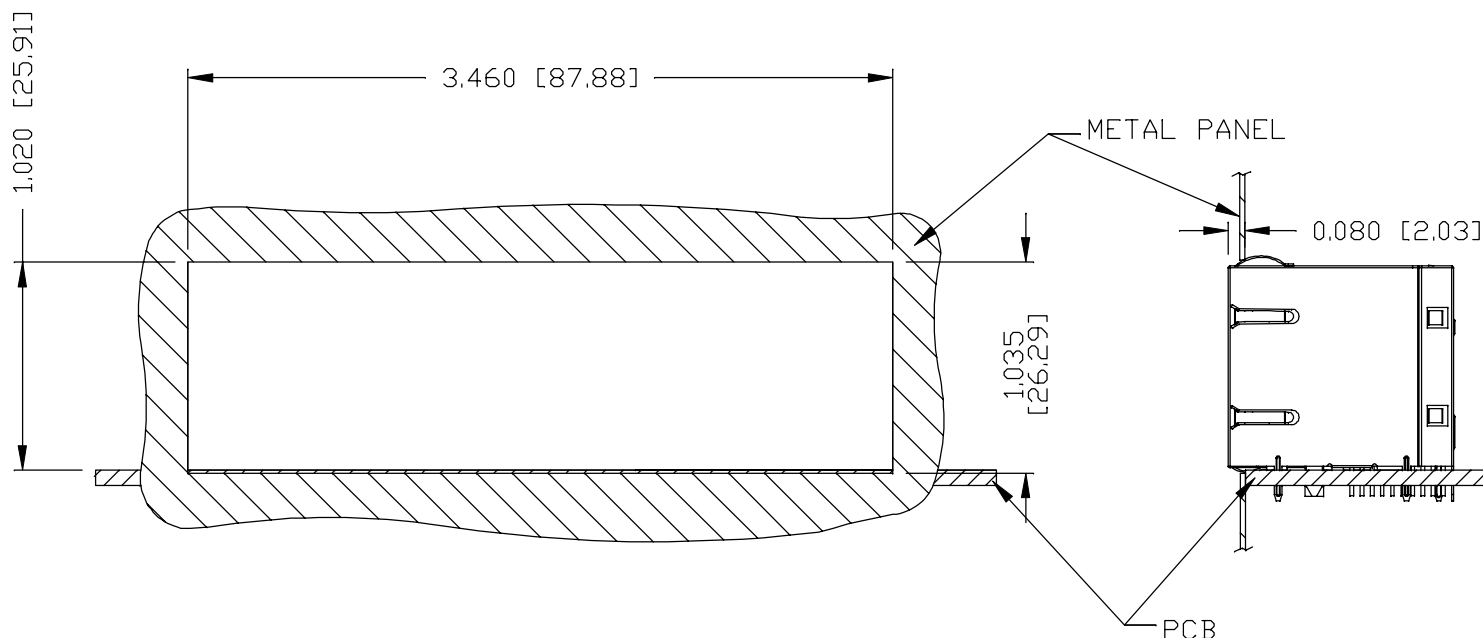
STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.
.X		UNIT : INCH [mm]
.XX		SCALE : N/A
.XXX	±0.004	SIZE : A4

REV. : C PAGE : 5





SUGGESTED PANEL OPENING



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 : 0200-9999-A9 (TOP)
0200-9999-A8 (BOTTOM)

PACKING QUANTITY : 15 PCS FINISHED GOODS PER TRAY
7 TRAYS (105 PCS FINISHED GOODS) PER CARTON BOX

NOTE : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX
(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

ORIGINATED BY LI QUANKUN DATE 2016-11-07	TITLE 2X6 gigabit MagJack® (8 Cores) 0833-2X6R-54-F PATENTED	PART NO. / DRAWING NO. 08332X6R54-F	STANDARD DIM. TOL. IN INCH	☐ METRIC DIM. AS REF.	REV. : C PAGE : 6
DRAWN BY ZHANG XUEZHENG DATE 2016-11-07		FILE NAME 08332X6R54-F_C.DWG	☐ .X ☐ .XX ☐ .XXX	☐ UNIT : INCH [mm] ☐ SCALE : N/A ☐ SIZE : A4	 bel MAGNETIC SOLUTIONS a bel group
			☐ ±0,004		

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bel:

[0833-2X6R-54-F](#)