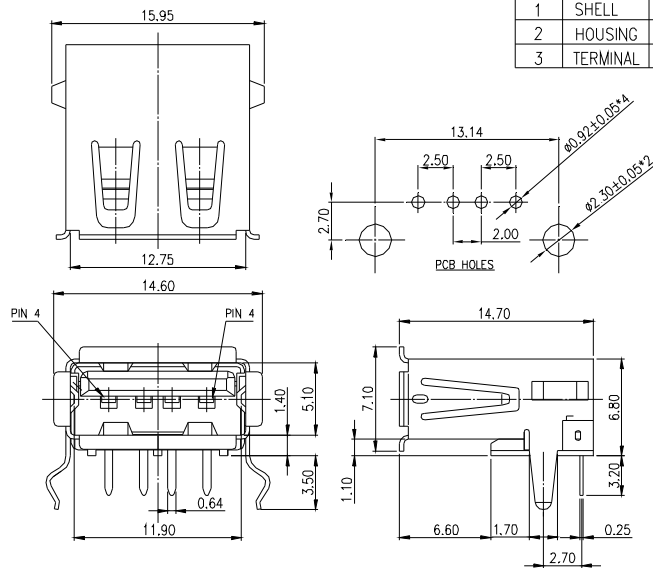


**USB  
CONNECTOR**

---

## USB X01 SERIES RIGHT ANGLE TYPE- Pa

ITEM	PART NAME	DESCRIPTION	QTY
1	SHELL	SPCC PLATING THE 90-120" NICKEL 80-120 /"THICKNESS 0.3MM	1
2	HOUSING	PBT 94V-0	1
3	TERMINAL	BRASS PLATING HALP-GOLD/TIN(GOLD FLASH) THICKNESS 0.25MM	4



### ELECTRICATION:

1. CONTACT RESISTANCE: 30 MΩ MAXIMUM WHEN MEASURED AT 20MV MAXIMUM OPEN CIRCUIT AT 100MA.
2. DIELECTRIC WITHSTANDING VOLTAGE: THE DIELECTRIC MUST WITHSTAND 500V AC MAX WITH 1 MINUTE.
3. INSULATION RESISTANCE: 1000 MΩ MINIMUM.
4. CURRENT RATING: 1.5A AT 250V AV MINIMUM WHEN MEASURED AT AN AMBIENT TEMPERATURE OF 25°C.



PART NO.	PALSTIC COLOR
USB001-Pa04_G_	WHITE
USB101-Pa04_G_	BLACK

**USB X01 - Pa 04 X GX**

**USB SERIES**  
SERIES NO.  
001: COLOR OF PLASTIC, WHITE  
101: COLOR OF PLASTIC, BLACK

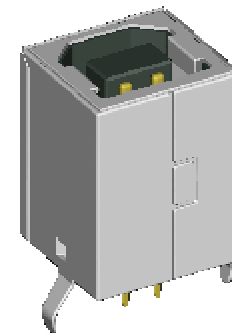
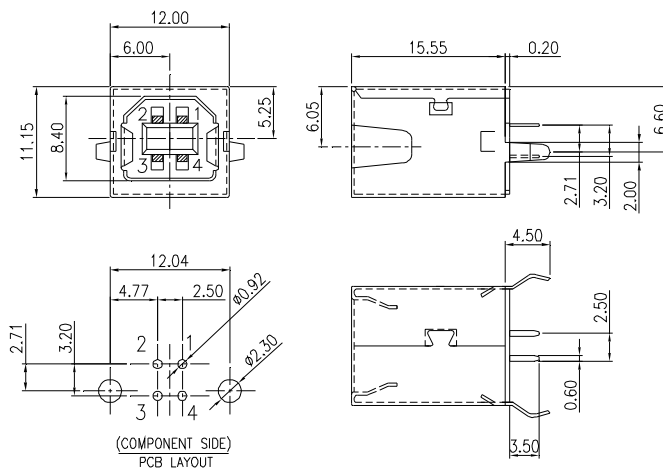
**PCB TYPE**  
Pa: RIGHT ANGLE TYPE

**NO. OF CONTACT**  
04

**SHELL PLATING**  
N: NICKEL PLATING  
T: TIN PLATING

**PLATING**  
Gft: GOLD FLASH ON CONTACT,  
TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT,  
TIN PLATED ON SOLDER TAIL

## USB X02 SERIES STRAIGHT TYPE- P



NO.	NAME	MATERIAL	FINISH	REMARK	Q'TY
1	HOUSING	P.B.T. G.F.	WHITE OR BLACK		1
2	PIN TERM.	PHOS. BRONZE T: 0.25	GOLD/TIN PLATED	N:1~1.5u" ; TIN:3u" GOLD:1~3u"	4
3	SHELL	BRASS T: 0.3	NICKEL PLATED	N:2~3u" ; T:3~5u"	1
4	BOTTOM COVER	P.B.T. G.F.	WHITE OR BLACK		1

PART NO.	PALSTIC COLOR
USB002-P04NG_	WHITE
USB102-P04NG_	BLACK

**USB X02 - P 04 N GX**

**USB SERIES**  
SERIES NO.  
002: COLOR OF PLASTIC, WHITE  
102: COLOR OF PLASTIC, BLACK

**PCB TYPE**  
P: STRAIGHT TYPE

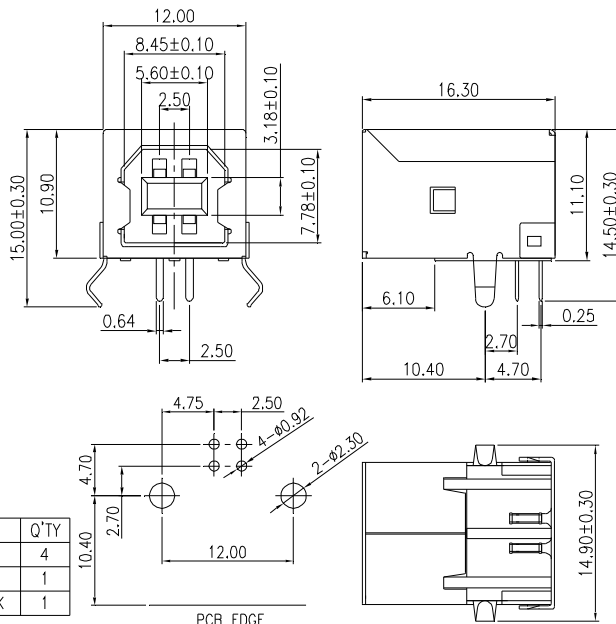
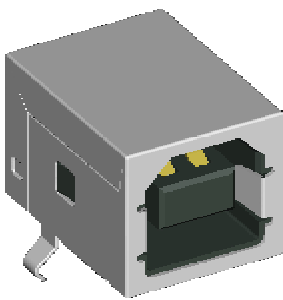
**NO. OF CONTACT**  
04

**SHELL PLATING**  
N: NICKEL PLATING

**PLATING**  
Gft: GOLD FLASH ON CONTACT,  
TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT,  
TIN PLATED ON SOLDER TAIL

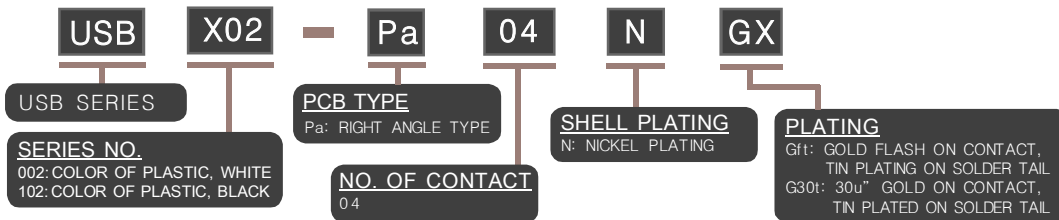
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

## USB X02 SERIES RIGHT ANGLE TYPE- Pa

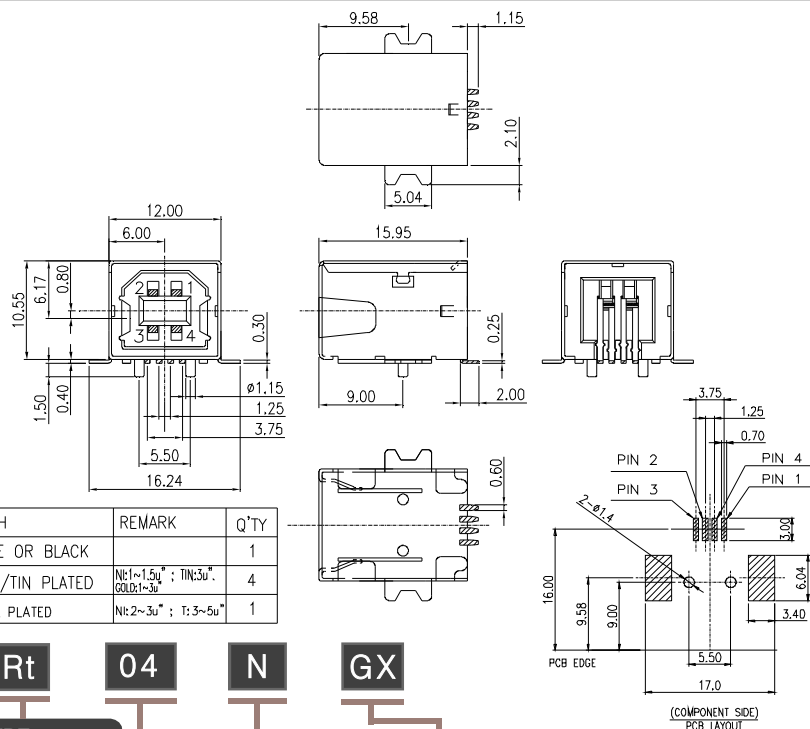
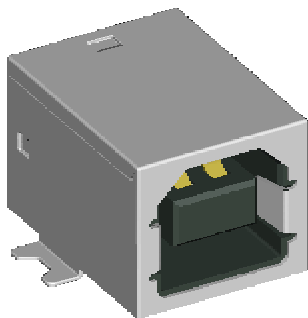


PART NO.	PALSTIC COLOR
USB002-Pa04NG_	WHITE
USB102-Pa04NG_	BLACK

ITEM	DESC.	MATERIAL	FINISH	REMARKS	Q'TY
1	TERMINAL	COPPER ALLOY	HALF GOLD/TIN PLATED	t=0.25	4
2	SHELL	SPCC	NIKEL PLATED	t=0.30	1
3	HOUSING	PBT	WHITE OR BLACK		1

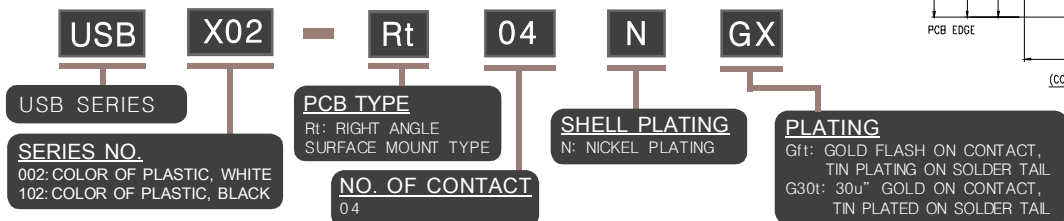


## USB X02 SERIES RIGHT ANGLE & SURFACE MOUNT TYPE- Rt



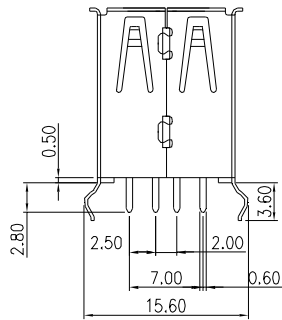
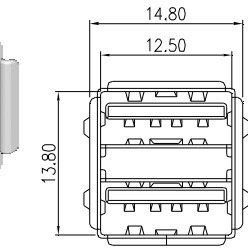
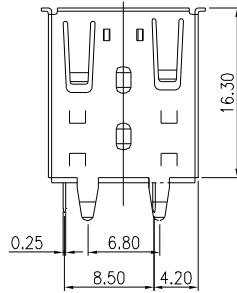
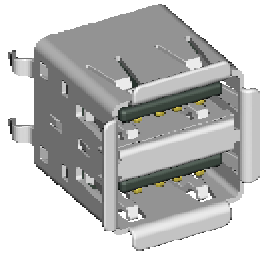
PART NO.	PALSTIC COLOR
USB002-Rt04NG_	WHITE
USB102-Rt04NG_	BLACK

NO.	NAME	MATERIAL	FINISH	REMARK	Q'TY
1	HOUSING	NYLON PA9T G.F.	WHITE OR BLACK		1
2	PIN TERM.	PHOS. BRONZE T: 0.25	GOLD/TIN PLATED	Nt:1~1.5u"; Tt:3u" G0L:1~3u"	4
3	SHELL	BRASS T: 0.3	NICKEL PLATED	Nt:2~3u"; T:3~5u"	1

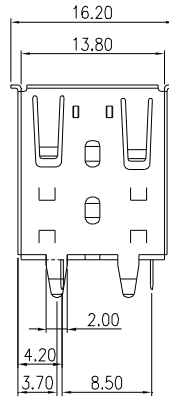


NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

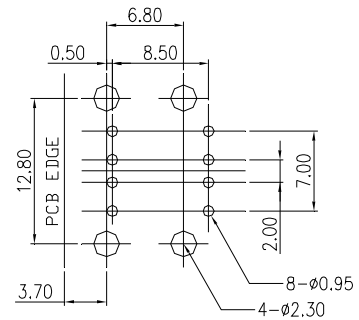
## USB X03 SERIES STRAIGHT TYPE- P



NO.	NAME	MATERIAL	FINISH	Q'TY	REMARK
1	HOUSING	P.B.T.	WHITE OR BLACK	1	
2	PIN TERM.	PHOS. BRONZE	GOLD-TIN PLATED	8	Ni:1~5u" ; TIN:3u" GOLD:30u"
3	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
4	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
5	SPEACER	P.C.	NATURAL	2	



PART NO.	PALSTIC COLOR
USB003-P08NG_	WHITE
USB103-P08NG_	BLACK



PCB LAYOUT (BOTTOM VIEW)

**USB**

**X03**

**P**

**08**

**N**

**GX**

USB SERIES

SERIES NO.

003: COLOR OF PLASTIC, WHITE  
103: COLOR OF PLASTIC, BLACK

PCB TYPE

P: STRAIGHT TYPE

NO. OF CONTACT

08

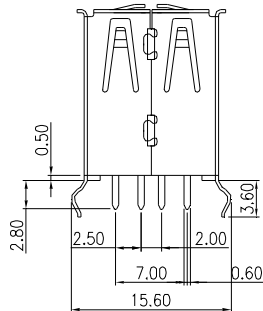
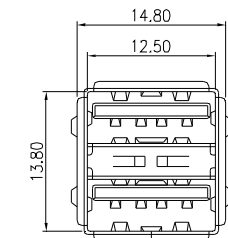
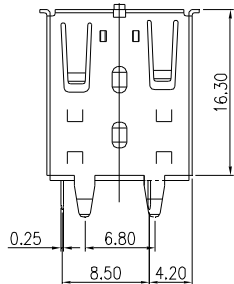
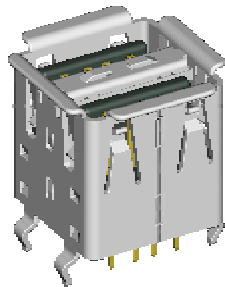
SHELL PLATING

N: NICKEL PLATING

PLATING

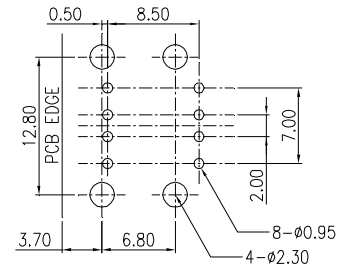
Gf: GOLD FLASH ON CONTACT,  
TIN PLATING ON SOLDER TAIL  
G30: 30u" GOLD ON CONTACT,  
TIN PLATED ON SOLDER TAIL

## USB X03 SERIES STRAIGHT TYPE- P WITH SPRINGY GND



NO.	NAME	MATERIAL	FINISH	Q'TY	REMARK
1	HOUSING	P.B.T.	WHITE OR BLACK	1	
2	PIN TERM.	PHOS. BRONZE	GOLD-TIN PLATED	8	Ni:1~5u" ; TIN:3u" GOLD:30u"
3	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
4	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
5	SPEACER	P.C.	NATURAL	2	

PART NO.	PALSTIC COLOR
USB003-P08NG_-S	WHITE
USB103-P08NG_-S	BLACK



PCB LAYOUT (BOTTOM VIEW)

**USB**

**X03**

**P**

**08**

**N**

**GX**

**S**

USB SERIES

SERIES NO.

003: COLOR OF PLASTIC, WHITE  
103: COLOR OF PLASTIC, BLACK

PCB TYPE

P: STRAIGHT TYPE

NO. OF CONTACT

08

SHELL PLATING

N: NICKEL PLATING

PLATING

Gf: GOLD FLASH ON CONTACT,  
TIN PLATING ON SOLDER TAIL  
G30: 30u" GOLD ON CONTACT,  
TIN PLATED ON SOLDER TAIL

S: WITH SPRINGY GND

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

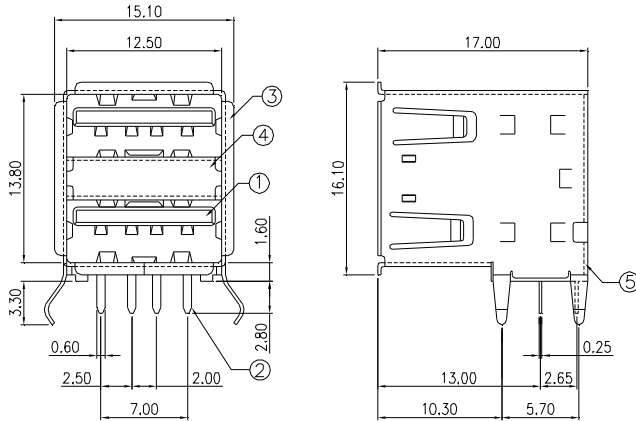
[www.mmtmachrone.com](http://www.mmtmachrone.com)

USA TEL : 1-510-979-2188  
FAX : 1-510-979-2189

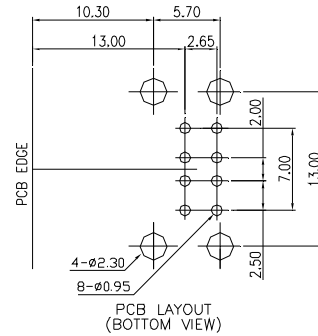
TAIWAN TEL : 886-2-2755-3193  
FAX : 886-2-2784-5109

SINGAPORE TEL : 65-6274-0566  
FAX : 65-6274-7891

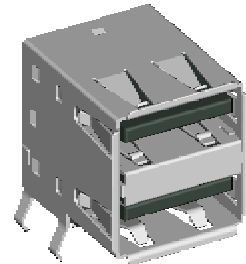
# USB X03 SERIES RIGHT ANGLE TYPE- Pa



PART NO.	PALSTIC COLOR
USB003-Pa08NG	WHITE
USB103-Pa08NG	BLACK



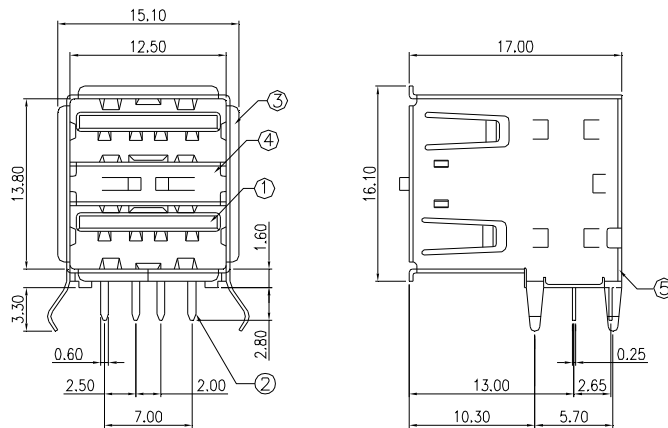
NO.	NAME	MATERIAL	FINISH	Q'TY	REMARK
1	HOUSING	P.B.T.	WHITE OR BLACK	1	
2	PIN TERM.	PHOS. BRONZE	GOLD-TIN PLATED	8	Ni:1~5u" ; TIN:3u" GOLD:30u"
3	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
4	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
5	SHELL	P.C.	NATURAL	1	



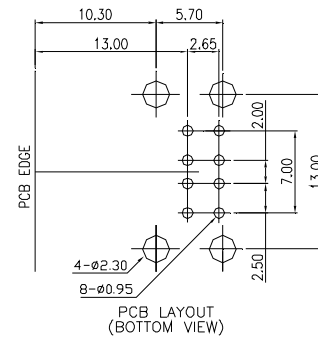
**USB X03 - Pa 08 N GX**

- USB SERIES**
- SERIES NO.**  
003: COLOR OF PLASTIC, WHITE  
103: COLOR OF PLASTIC, BLACK
- PCB TYPE**  
Pa: RIGHT ANGLE TYPE
- NO. OF CONTACT**  
08
- SHELL PLATING**  
N: NICKEL PLATING
- PLATING**  
Gf: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

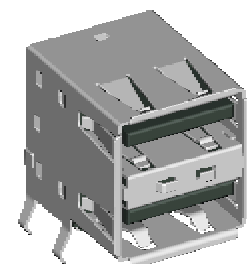
# USB X03 SERIES RIGHT ANGLE TYPE- Pa WITH SPRINGY GND



PART NO.	PALSTIC COLOR
USB003-Pa08NG-S	WHITE
USB103-Pa08NG-S	BLACK



NO.	NAME	MATERIAL	FINISH	Q'TY	REMARK
1	HOUSING	P.B.T.	WHITE OR BLACK	1	
2	PIN TERM.	PHOS. BRONZE	GOLD-TIN PLATED	8	Ni:1~5u" ; TIN:3u" GOLD:30u"
3	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
4	SHELL	BRASS, 0.3mm	NICKEL PLATED	1	Ni:2~3u" ; TIN:3~5u"
5	SHELL	P.C.	NATURAL	1	

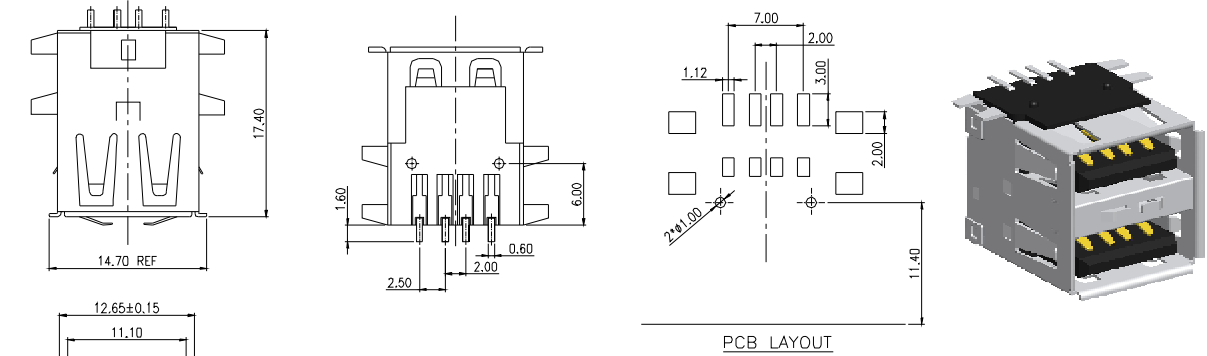


**USB X03 - Pa 08 N GX - S**

- USB SERIES**
- SERIES NO.**  
003: COLOR OF PLASTIC, WHITE  
103: COLOR OF PLASTIC, BLACK
- PCB TYPE**  
Pa: RIGHT ANGLE TYPE
- NO. OF CONTACT**  
08
- SHELL PLATING**  
N: NICKEL PLATING
- S: WITH SPRINGY GND**
- PLATING**  
Gf: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

## USB X03 SERIES RIGHT ANGLE & SURFACE MOUNT TYPE- Rt



**MATERIAL:**  
 CONTACT: PHOSPHOR BRONZE  
 INSULATOR: PBT, UL 94V-0 RATED  
 FRONT SHELL: BRASS  
 BACK SHELL: SPCC  
 LATCH: BRASS

<b>USB</b>	<b>X03</b>	<b>Rt</b>	<b>08</b>	<b>N</b>	<b>GX</b>
------------	------------	-----------	-----------	----------	-----------

**USB SERIES**  
**SERIES NO.**  
 003: COLOR OF PLASTIC, WHITE  
 103: COLOR OF PLASTIC, BLACK

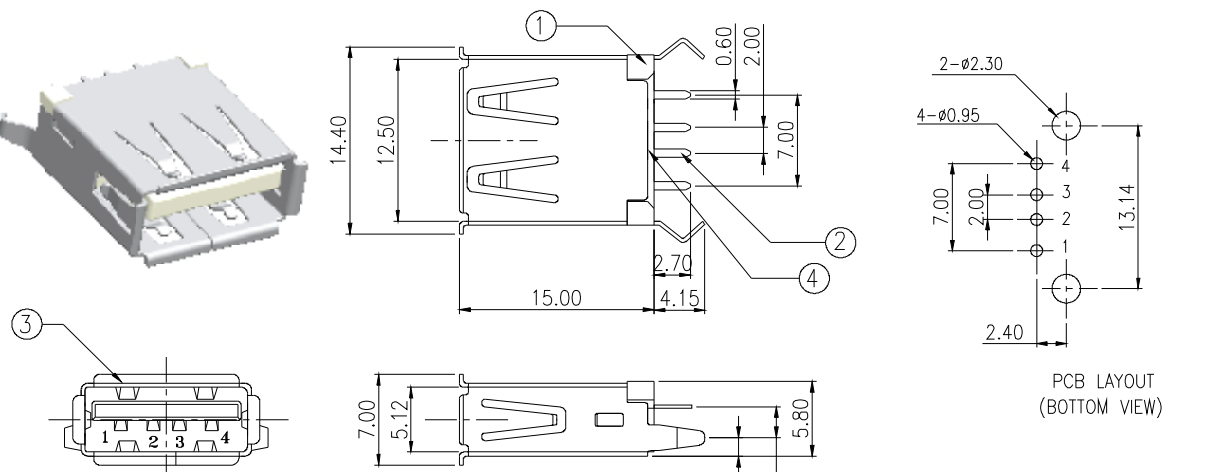
**PCB TYPE**  
 Rt: RIGHT ANGLE & SURFACE TYPE  
**NO. OF CONTACT**  
 08

**SHELL PLATING**  
 N: NICKEL PLATING

**PLATING**  
 Gft: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
 G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

PART NO.	PALSTIC COLOR
USB003-Rt08NG_	WHITE
USB103-Rt08NG_	BLACK

## USB X04 SERIES STRAIGHT TYPE- P



<b>USB</b>	<b>X04</b>	<b>P</b>	<b>04</b>	<b>N</b>	<b>GX</b>
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**USB SERIES**  
**SERIES NO.**  
 004: COLOR OF PLASTIC, WHITE  
 104: COLOR OF PLASTIC, BLACK

**PCB TYPE**  
 P: STRAIGHT TYPE  
**NO. OF CONTACT**  
 04

**SHELL PLATING**  
 N: NICKEL PLATING

**PLATING**  
 Gft: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
 G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

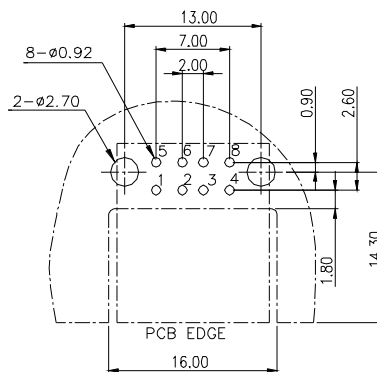
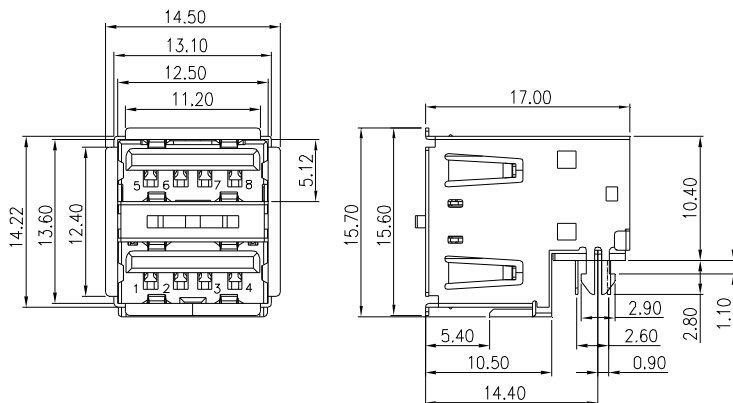
PART NO.	PALSTIC COLOR
USB004-P08NG_	WHITE
USB104-P08NG_	BLACK

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

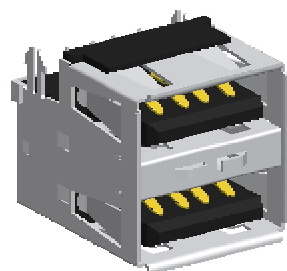
# USB X04 SERIES RIGHT ANGLE TYPE- Pa WITH SPRINGY GND

**MATERIAL:**

CONTACT: BRASS T=0.25mm.  
 INSULATOR: PBT, GLASS FIBRE  
 UL 94V-0.  
 FORNT SHELL: IRON T=0.30mm



PCB LAYOUT



**USB X04 - Pa 08 N GX**

USB SERIES

PCB TYPE

Pa: RIGHT ANGLE TYPE

SHELL PLATING

N: NICKEL PLATING

SERIES NO.

004: COLOR OF PLASTIC, WHITE  
 104: COLOR OF PLASTIC, BLACK

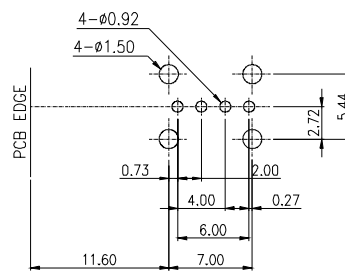
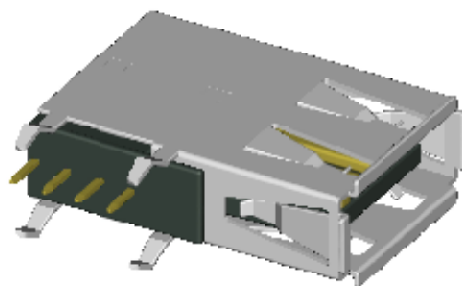
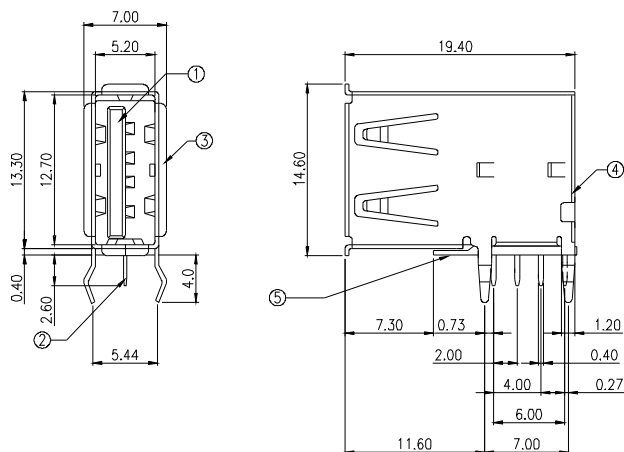
NO. OF CONTACT

08

PLATING

Gt: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
 G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

# USB X05 SERIES RIGHT ANGLE TYPE- Pa



PCB LAYOUT (BOTTOM VIEW)

NO.	NAME	MATERIAL	FINISH	Q'TY	REMARK
1	HOUSING	P.B.T. G.F.	WHITE OR BLACK	1	
2	CONTACT	PHOS. BRONZE T:0.25	GOLD-TIN PLATED	4	Ni:1~5u" ; TIN:3u" GOLD:1~30u"
3	SHELL	BRASS T:0.3	NICKEL PLATED	1	Ni:2~3u"
4	SHELL	BRASS T:0.3	NICKEL PLATED	1	Ni:2~3u"
5	BOTTOM COVER	P.B.T. G.F.	WHITE OR BLACK	1	

**USB X05 - Pa 04 N GX**

USB SERIES

PCB TYPE

Pa: RIGHT ANGLE TYPE

SHELL PLATING

N: NICKEL PLATING

SERIES NO.

005: COLOR OF PLASTIC, WHITE  
 105: COLOR OF PLASTIC, BLACK

NO. OF CONTACT

04

PLATING

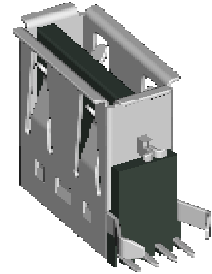
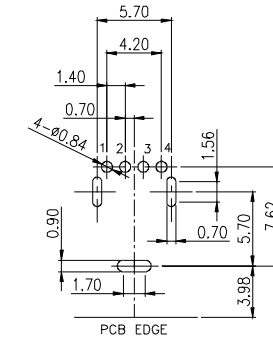
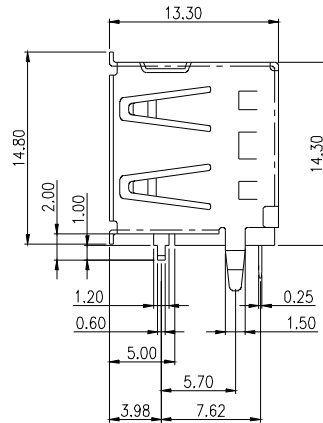
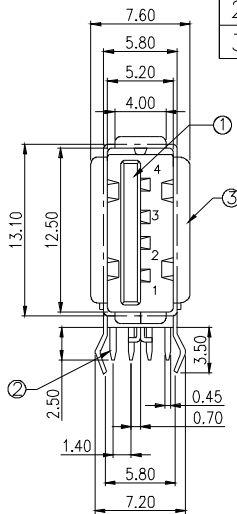
Gt: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
 G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

PART NO.	PALSTIC COLOR
USB005-Pa04NG	WHITE
USB105-Pa04NG	BLACK

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

## USB X07 SERIES RIGHT ANGLE TYPE- Pa

NO.	NAME	MATERIAL	FINISH	REMARK	Q'TY
1	HOUSING	NYLON PA9T G.F.			1
2	PIN TERM.	PBS T:0.25	GOLD/TIN PLATED	Ni:1~1.5u", TIN:3u", GOLD:1~3u"	4
3	SHELL	BRASS T:0.3	TIN/NICKEL PLATED	Ni:2~3u"	1



RECOMMENDED PCB LAYOUT(TOP VIEW)

**USB X07 - Pa 04 N GX**

USB SERIES

PCB TYPE

Pa: RIGHT ANGLE TYPE

SHELL PLATING

N: NICKEL PLATING

SERIES NO.

007: COLOR OF PLASTIC, WHITE  
107: COLOR OF PLASTIC, BLACK

NO. OF CONTACT

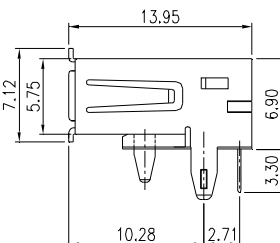
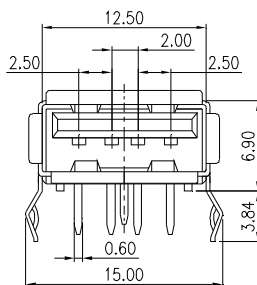
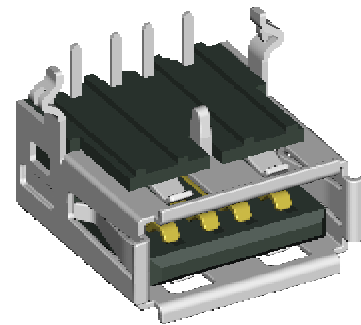
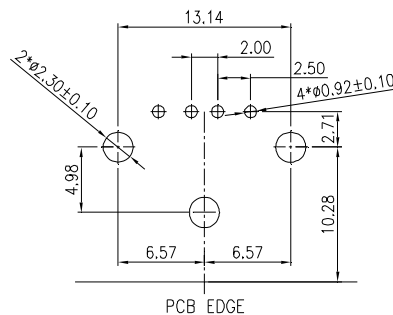
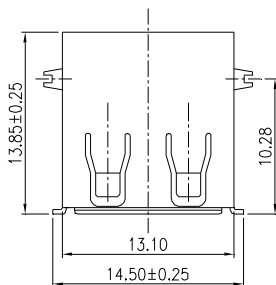
04

PLATING

Gf: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

PART NO.	PALSTIC COLOR
USB007-Pa04NG	WHITE
USB107-Pa04NG	BLACK

## USB X11 SERIES RIGHT ANGLE TYPE- Pa



**MATERIAL:**  
CONTACT: BRASS  
INSULATOR: PBT, UL 94V-0 RATED.  
SHELL: BRASS.

**USB X11 - Pa 04 N GX**

USB SERIES

PCB TYPE

Pa: RIGHT ANGLE TYPE

SHELL PLATING

N: NICKEL PLATING

SERIES NO.

011: COLOR OF PLASTIC, WHITE  
111: COLOR OF PLASTIC, BLACK

NO. OF CONTACT

04

PLATING

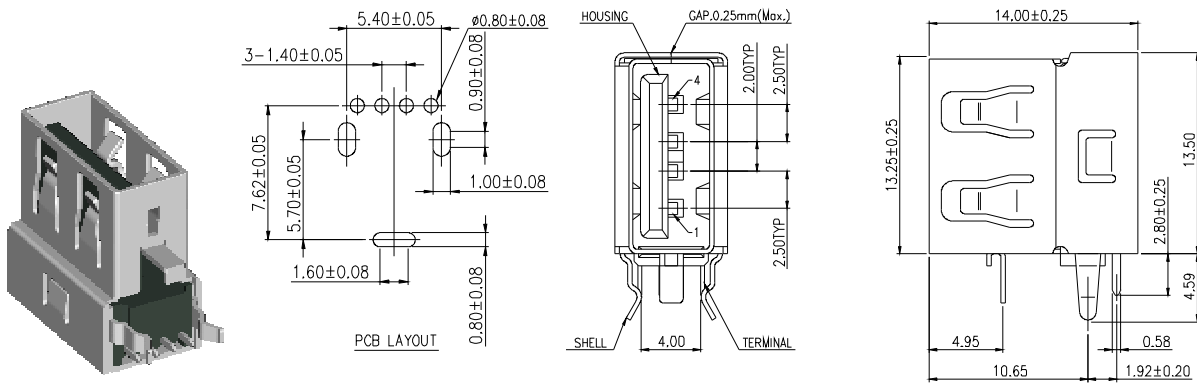
Gf: GOLD FLASH ON CONTACT,  
TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT,  
TIN PLATED ON SOLDER TAIL

PART NO.	PLASTIC COLOR
USB011-Pa04NG_	WHITE
USB111-Pa04NG_	BLACK

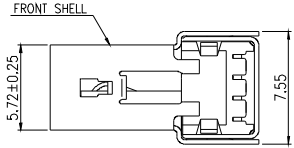
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE



# USB X13 SERIES RIGHT ANGLE TYPE- Pa



NO.	DESC.	MATERIAL	FINISH	REMARKS
1	TERMINAL	PHOSPGOR ALLOY	GOLD FLASH	t=0.25
2	SHELL	BRASS	NICKEL PLATED	t=0.30
3	HOUSING	PBT+G.F.,UL94V-0		

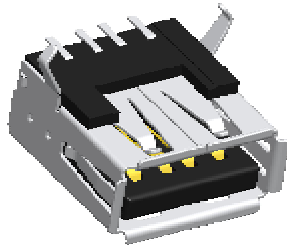


PART NO.	PLASTIC COLOR
USB013-Pa04NG	WHITE
USB113-Pa04NG	BLACK

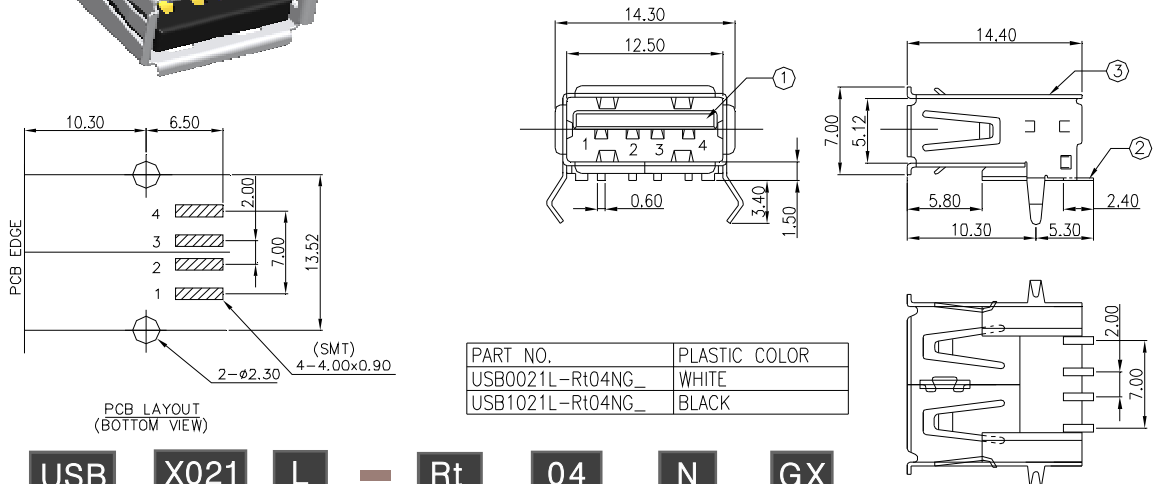
**USB X13 - Pa 04 N GX**

- USB SERIES**
- SERIES NO.**  
013: COLOR OF PLASTIC, WHITE  
113: COLOR OF PLASTIC, BLACK
- PCB TYPE**  
Pa: RIGHT ANGLE TYPE
- NO. OF CONTACT**  
04
- SHELL PLATING**  
N: NICKEL PLATING
- PLATING**  
Gf: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

# USB X021L SERIES RIGHT ANGLE & SURFACE MOUNT TYPE- Rt



NO.	NAME	MATERIAL	FINISH	REMARK	Q'TY
1	HOUSING	NYLON PA9T G.F.			1
2	PIN TERM.	PHOS. BRONZE T: 0.25	GOLD-TIN PLATED	Ni: 1~1.5u; TIN: 3u. GOLD: 1~3u	4
3	SHELL	BRASS T: 0.3	NICKEL PLATED	Ni: 2~3u"	1



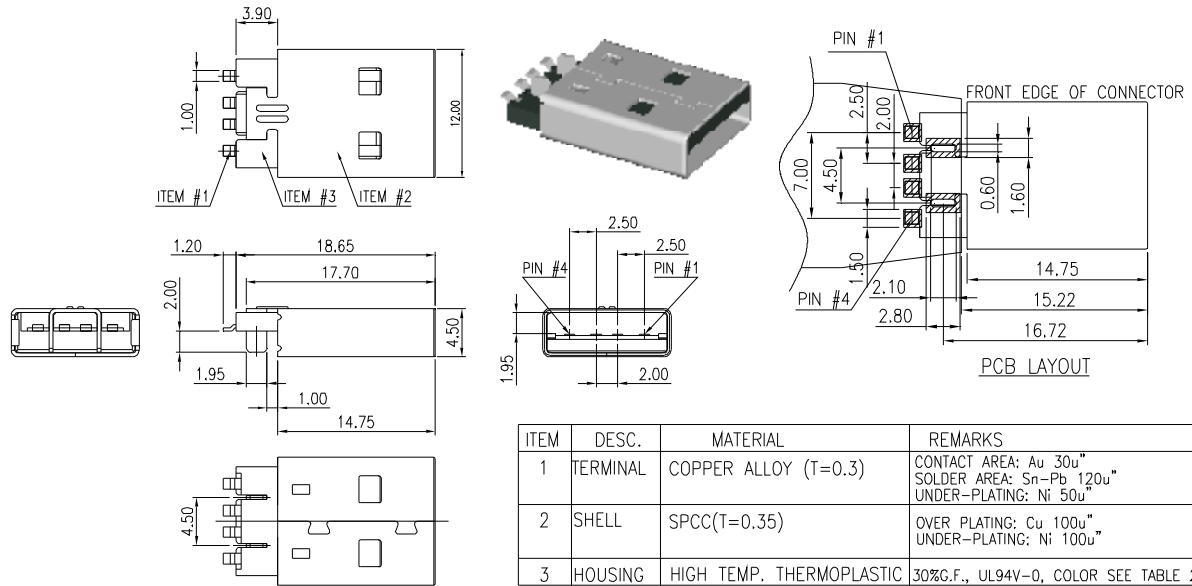
PART NO.	PLASTIC COLOR
USB0021L-Rt04NG	WHITE
USB1021L-Rt04NG	BLACK

**USB X021 L - Rt 04 N GX**

- USB SERIES**
- SERIES NO.**  
0021: COLOR OF PLASTIC, WHITE  
1021: COLOR OF PLASTIC, BLACK
- LEAD FREE**
- PCB TYPE**  
Rt: RIGHT ANGLE & SURFACE MOUNT
- NO. OF CONTACT**  
04
- SHELL PLATING**  
N: NICKEL PLATING
- PLATING**  
Gf: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

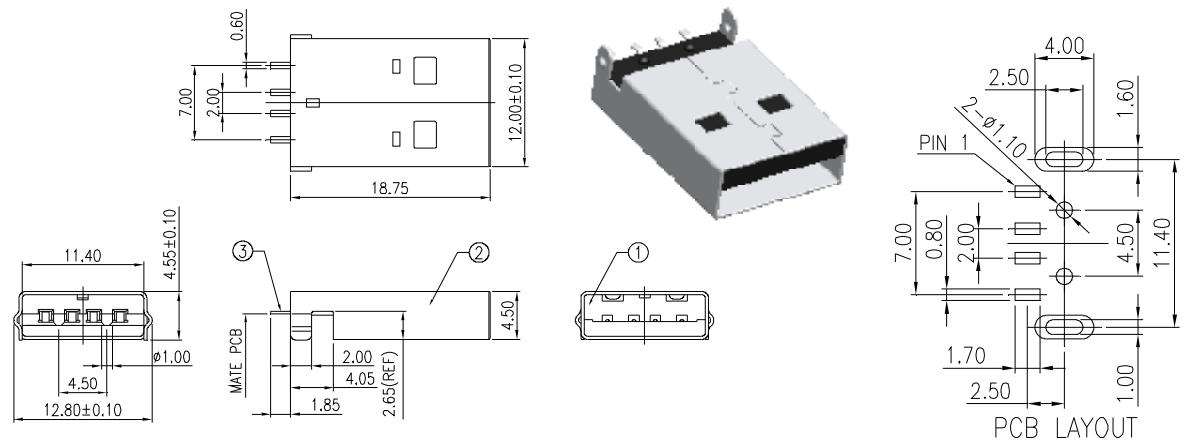
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

## USB X31 SERIES RIGHT ANGLE & SURFACE MOUNT TYPE-Rt



<b>USB</b>	<b>X31</b>	<b>Rt</b>	<b>04</b>	<b>N</b>	<b>GX</b>	PART NO.	PALSTIC COLOR
USB SERIES						USB031-Rt04NG_	BEIGE
PCB TYPE Rt: RIGHT ANGLE & SURFACE MOUNT						USB131-Rt04NG_	BLACK
SHELL PLATING N: NICKEL PLATING							
PLATING Gft: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL							
SERIES NO. 031: COLOR OF PLASTIC, WHITE 131: COLOR OF PLASTIC, BLACK							
NO. OF CONTACT 04							

## USB X32 SERIES RIGHT ANGLE & SURFACE MOUNT TYPE-Rt



<b>USB</b>	<b>X32</b>	<b>Rt</b>	<b>04</b>	<b>N</b>	<b>GX</b>	PART NO.	PALSTIC COLOR
USB SERIES						USB032-Rt04NG_	BEIGE
PCB TYPE Rt: RIGHT ANGLE & SURFACE MOUNT						USB132-Rt04NG_	BLACK
SHELL PLATING N: NICKEL PLATING							
PLATING Gft: GOLD FLASH ON CONTACT, TIN PLATING ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL							
SERIES NO. 032: COLOR OF PLASTIC, WHITE 132: COLOR OF PLASTIC, BLACK							
NO. OF CONTACT 04							

ITEM	PART NAME	MATERIAL	PLATING	Q'TY
1	HOUSING	6T		1
2	SHELL	SPCC (t=0.30)	NICKEL 80~120u'	1
3	TERMINAL	PHOSPHOR BRONZE (t=0.25)	HLAF GOLD/TIN 30~80u'	4

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE