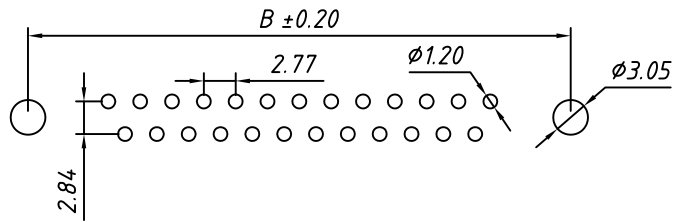
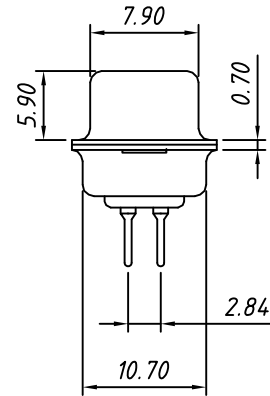
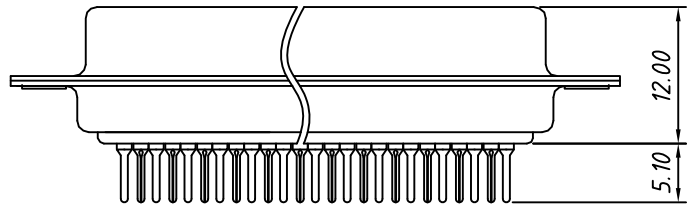
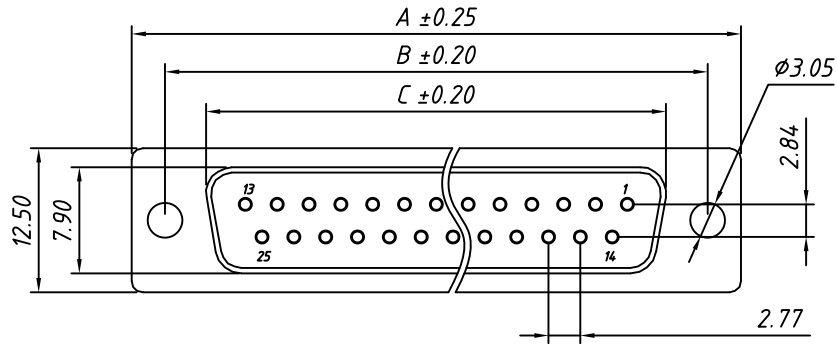


1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

Call waiting force		
Contacts	Insertion	Withdraw
09M/09F	≤4.0kgf	≥1.8kgf
15M/15F	≤4.5kgf	≥2.0kgf
25M/25F	≤6.0kgf	≥2.5kgf
37M/37F	≤8.0kgf	≥3.5kgf

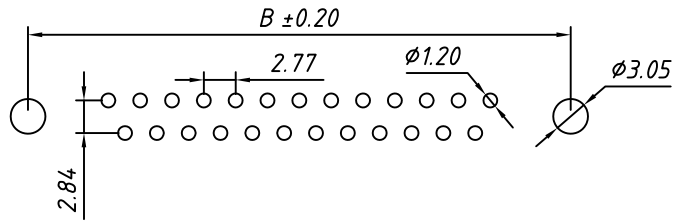
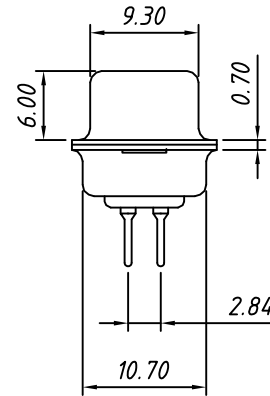
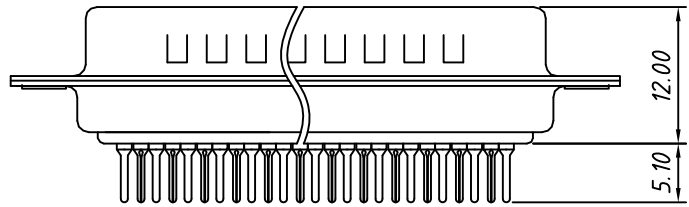
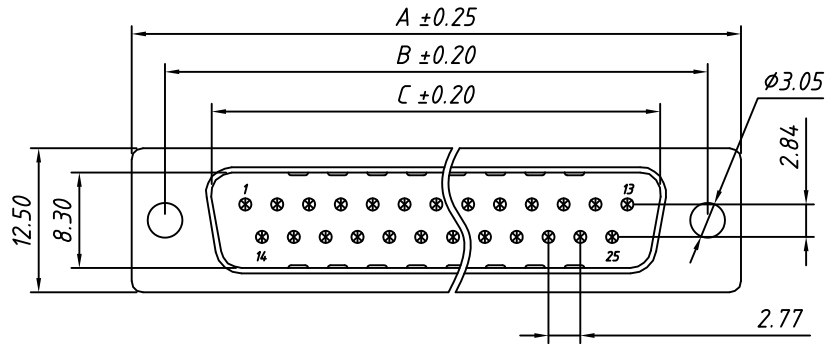
Order Information

L - KLS1 - 221 - XX - F - L
 RoHS _____
 D-SUB Connector, _____
 2 Row Through Hole _____
 XX-No. of 09,15,25,37,50pins _____
 Connector type: M-Male F-Female _____
 Housing Color: _____
 B-Black L-Blue W-White

Number of Contacts	DIMENSION		
	A±0.25	B±0.20	C±0.20
09	30.81	24.99	16.33
15	39.14	33.32	24.66
25	53.04	47.04	38.38
37	69.32	63.50	54.84

GENERAL TOLERANCE	PROJECTION		Description:
X. ±0.30	UNITS	mm	D-SUB Connector, Panel Mount, Through Hole, Female
.X ±0.25	SCALE	1:1	
.XX ±0.20	Draw by:	Daniel	KLS P/N: L-KLS1-221-XX-F-L
ANGLE TOLERANCE	Check by:	Daniel	NingBo KLS ELECTRONIC CO.,L TD.
X. ±3°	Date	2018-03-01	
.X ±2°	SHEET	1 OF 1	
.XX ±1°			

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

Call waiting force		
Contacts	Insertion	Withdraw
09M/09F	≤4.0kgf	≥1.8kgf
15M/15F	≤4.5kgf	≥2.0kgf
25M/25F	≤6.0kgf	≥2.5kgf
37M/37F	≤8.0kgf	≥3.5kgf

Order Information

L - KLS1 - 221 - XX - M - L

RoHS _____

D-SUB Connector, 2 Row Through Hole _____

XX-No. of 09, 15, 25, 37, 50 pins _____

Connector type: M-Male F-Female _____

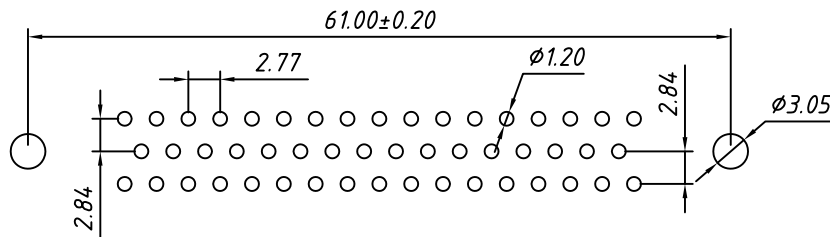
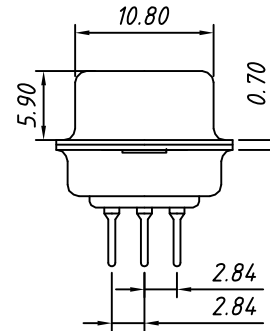
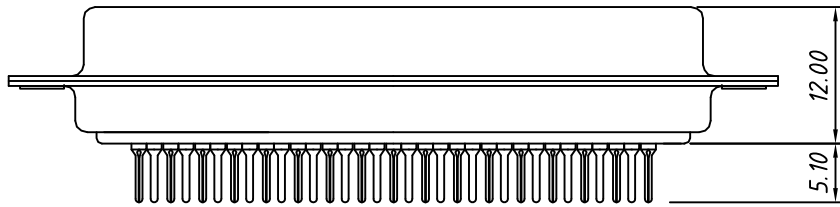
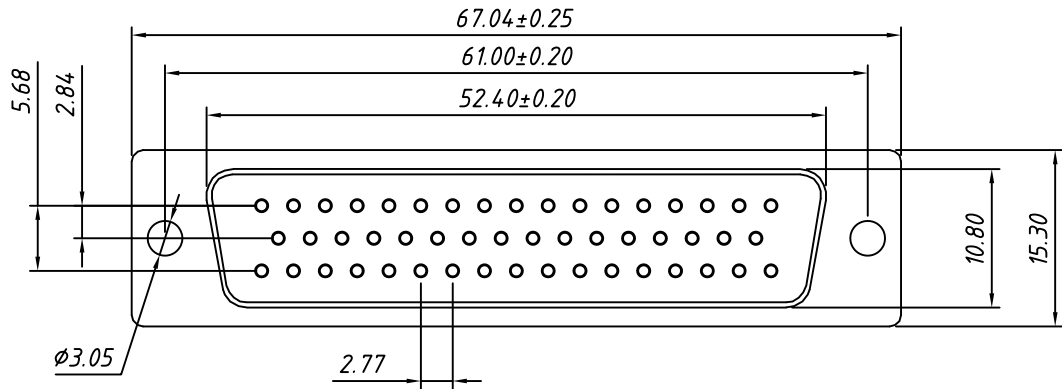
Housing Color: _____

B-Black L-Blue W-White

Number of Contacts	DIMENSION		
	A±0.25	B±0.20	C±0.20
09	30.81	24.99	16.92
15	39.14	33.32	25.25
25	53.04	47.04	38.96
37	69.32	63.50	55.42

GENERAL TOLERANCE	PROJECTION		Description:
X. ±0.30	UNITS	mm	D-SUB Connector, Panel Mount, Through Hole, Male
.X ±0.25	SCALE	1:1	
.XX ±0.20	Draw by:	Daniel	KLS P/N: L-KLS1-221-XX-M-L
ANGLE TOLERANCE	Check by:	Daniel	NingBo KLS ELECTRONIC CO., L TD.
X. ±3°	Date	2018-03-01	
.X ±2° .XX ±1°	SHEET	1 OF 1	

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled ,UL94V-0
Contacts: Brass ,Gold Plating or
Gold Plating on Contact Arer,
Tin on Solder Tail.
Shell: Steel, Nickel Plating

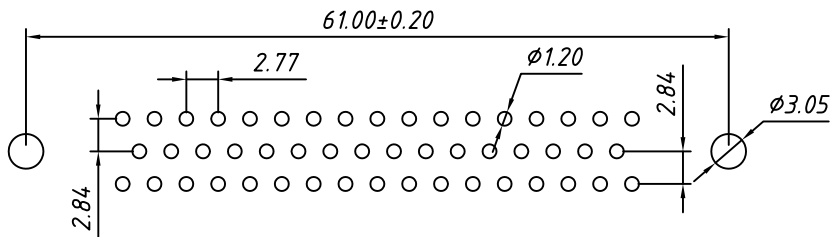
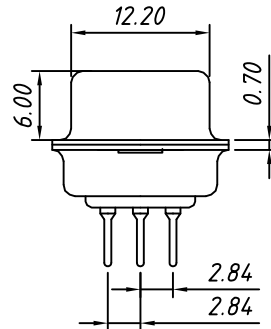
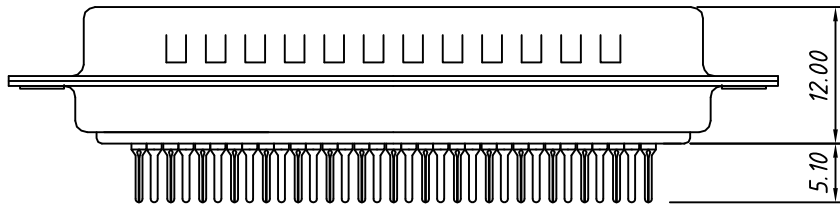
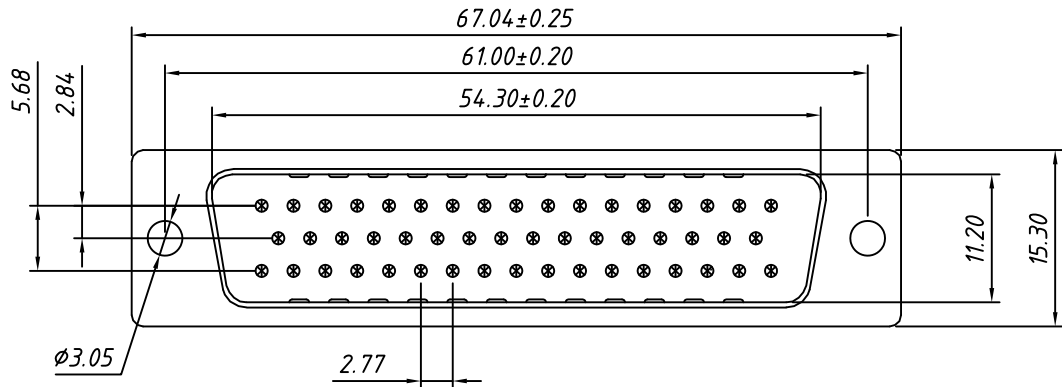
Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

Order Information

L - KLS1 - 221 - 50 - F - L
RoHS
D-SUB Connector,
Through Hole
XX-No. of 09,15,25,37,50pins
Connector type: M-Male F-Female
Housing Color:
B-Black L-Blue W-White

GENERAL TOLERANCE	PROJECTION		Description:
X. ±0.30	UNITS	mm	D-SUB Connector, Panel Mount, Through Hole, Female KLS P/N: L-KLS1-221-50-F-L
.X ±0.25	SCALE	1:1	
.XX ±0.20	Draw by:	Daniel	
ANGLE TOLERANCE	Check by:	Daniel	NingBo KLS ELECTRONIC CO.,L TD.
X. ±3°	Date	2018-03-01	
.X ±2°	SHEET	1 OF 1	
.XX ±1°			

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

Order Information

L - KLS1 - 221 - 50 - M - L
RoHS
D-SUB Connector, Through Hole
XX-No. of 09, 15, 25, 37, 50 pins
Connector type: M-Male F-Female
Housing Color: B-Black L-Blue W-White

GENERAL TOLERANCE	PROJECTION		Description:
X. ±0.30	UNITS	mm	D-SUB Connector, Panel Mount, Through Hole, Male KLS P/N: L-KLS1-221-50-M-L
.X ±0.25	SCALE	1:1	
.XX ±0.20	Draw by:	Daniel	
ANGLE TOLERANCE	Check by:	Daniel	NingBo KLS ELECTRONIC CO., L TD.
X. ±3°	Date	2018-03-01	
.X ±2°	SHEET	1 OF 1	
.XX ±1°			