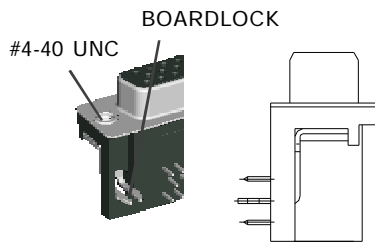


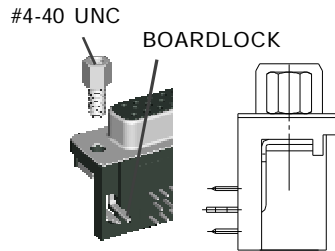
MMI

**HIGH DENSITY D-SUB
(STRAIGHT TYPE)**

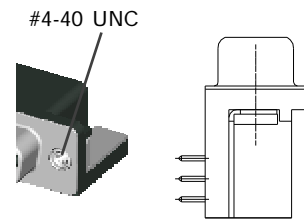
HIGH DENSITY D- SUB 1XX SERIES MOUNTING OPTIONS



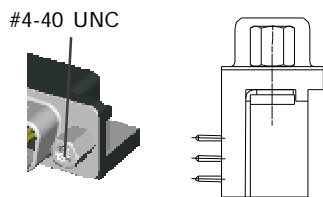
a TYPE
WITH #4-40UNC THREAD INSERT
GROUNDING BRACKET &
BOARDLOCK



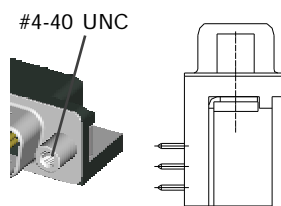
as TYPE
WITH #4-40UNC HEX NUT
GROUNDING BRACKET &
BOARDLOCK



b TYPE
WITH #4-40UNC THREAD INSERT
GROUNDING BRACKET

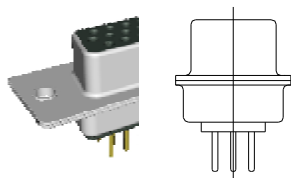


d TYPE
WITH FIXED #4-40UNC HEX NUT
GROUNDING BRACKET

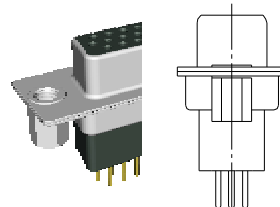


rd TYPE
WITH FIXED #4-40UNC ROUND NUT
GROUNDING BRACKET

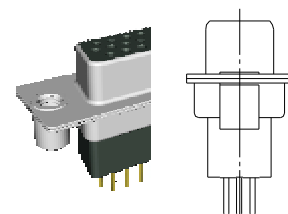
HIGH DENSITY D- SUB 2XX SERIES MOUNTING OPTIONS



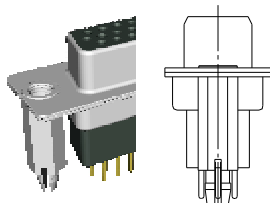
H TYPE
WITH MOUNTING HOLE ONLY



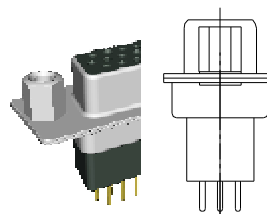
I TYPE
WITH #4-40UNC HEX NUT
IN THE REAR OF THE SHELL



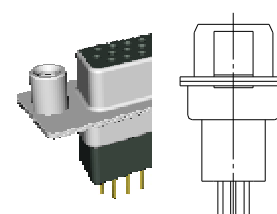
J TYPE
WITH #4-40UNC ROUND NUT
IN THE REAR OF THE SHELL



K TYPE
WITH #4-40UNC IN THE REAR SHELL
USE RIVET AS BOARDLOCK



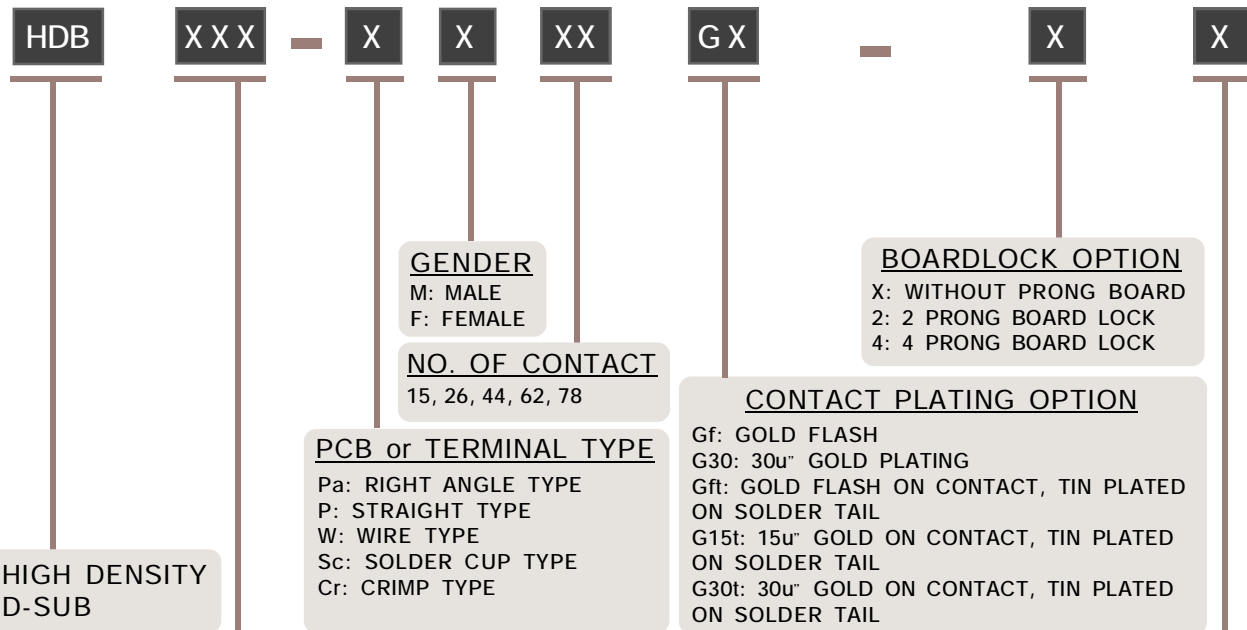
L TYPE
WITH #4-40UNC HEX NUT
IN THE FRONT OF THE SHELL



M TYPE
WITH #4-40UNC ROUND NUT
IN THE FRONT OF THE SHELL

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

HIGH DENSITY D-SUB CONNECTOR PART NO. INFORMATION



SERIES NO.

1XX: RIGHT ANGLE TYPE
-130
-132
-14X
-150

2XX: STRAIGHT TYPE
-200
-210
-230
-250

3XX: WIRE TYPE
-300: LENTH= 10.00 mm
-310: LENTH= 13.00 mm
-320: LENTH= 17.50 mm

4XX: SOLDER CUP TYPE
- 400

5XX: CRIMP TYPE
- 500

9XX: MACHINE PIN TYPE
-900: FOOTPRINT= 9.30 mm
-910: FOOTPRINT= 7.19 mm

MOUNTING TYPE

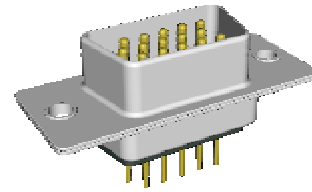
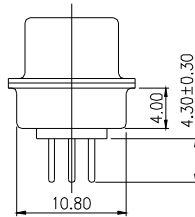
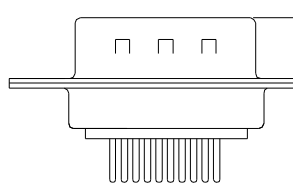
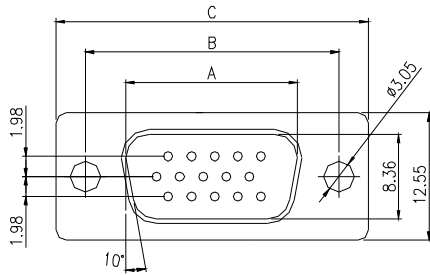
FOR RIGHT ANGLE TYPE
a :WITH #4-40UNC THREAD INSERT GROUNDING BRACKET & BOARDLOCK
b: WITH #4-40UNC THREAD INSERT GROUNDING BRACKET
d: WITH FIXED #4-40UNC HEX NUT GROUNDING BRACKET
rd: WITH FIXED #4-40UNC ROUND NUT GROUNDING BRACKET

FOR STRAIGHT TYPE
H: WITH MOUNTING HOLE ONLY
I: WITH #4-40UNC HEX NUT IN THE REAR OF THE SHELL
J: WITH #4-40UNC ROUND NUT IN THE REAR OF THE SHELL
K: WITH #4-40UNC IN THE REAR SHELL USE RIVET AS BOARDLOCK
L: WITH #4-40UNC HEX NUT IN THE FRONT OF THE SHELL
M: WITH #4-40UNC ROUND NUT IN THE FRONT OF THE SHELL

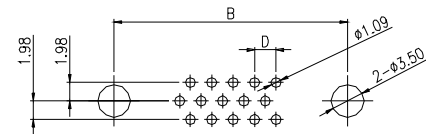
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 200 SERIES - MOUNTING TYPE H STRAIGHT TYPE - P

MALE

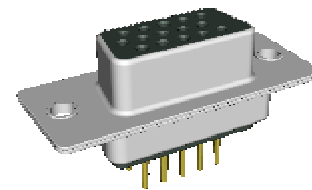
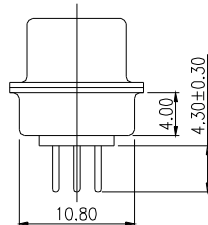
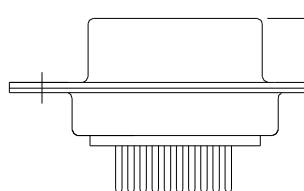
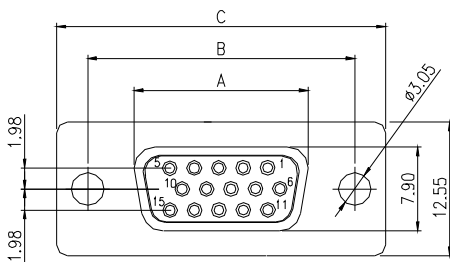


PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB200-PM15GX-H	15	16.92	24.99	30.61	2.29
HDB200-PM26GX-H	26	25.25	33.32	39.14	2.29
HDB200-PM44GX-H	44	36.96	47.04	53.04	2.29
HDB200-PM62GX-H	62	55.42	63.50	69.32	2.41



RECOMMENDED PCB LAYOUT

FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB200-PF15GX-H	15	16.33	24.99	30.61	2.29
HDB200-PF26GX-H	26	24.66	33.32	39.14	2.29
HDB200-PF44GX-H	44	38.38	47.04	53.04	2.29
HDB200-PF62GX-H	62	54.84	63.50	69.32	2.41

HDB **200** - **P** **X** **XX** **GX** - **H**

HIGH DENSITY
D- SUB

SERIES NO.
200

PCB TYPE.
P: STRAIGHT TYPE

GENDER
M: MALE
F: FEMALE

NO. OF CONTACT
15, 26, 44, 62

CONTACT PLATING OPTION

Gf: GOLD FLASH
Gf1: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL
G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

MOUNTING TYPE
H: WITH MOUNTING HOLE ONLY

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 5 AMP
CONTACT RESISTANCE: 15M OHM MAX.
INSULATION RESISTANCE: 5000 OHM MIN. AT 500V DC
DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V OHMS.
OPERATING TEMPERATURE:-55°C~ +105°C

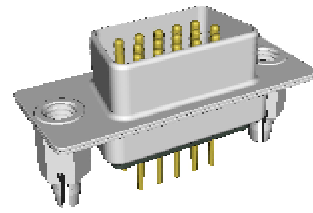
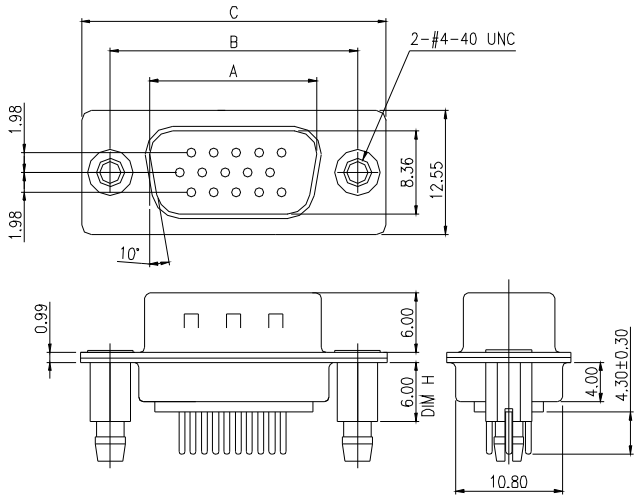
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
SHELL: COLD ROLLER STEEL
CONTACTS: PHOSPHOR BRONZE

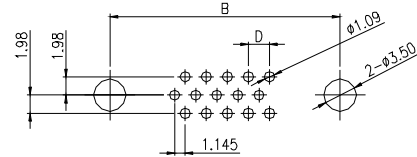
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 200 SERIES - MOUNTING TYPE K STRAIGHT TYPE - P

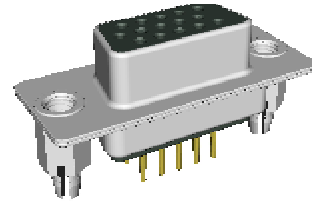
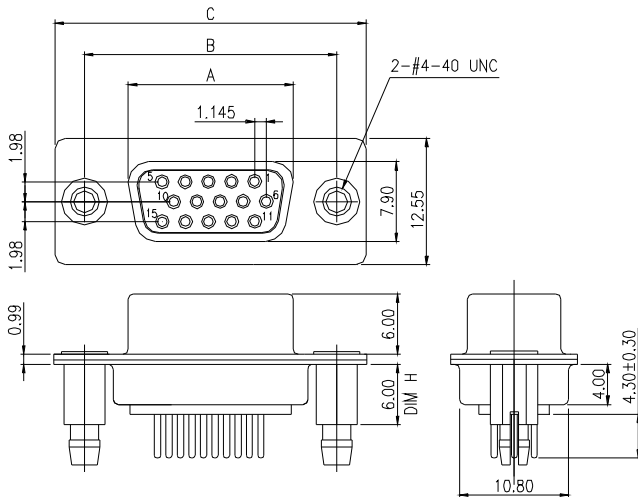
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB200-PM15GX-K6	15	16.92	24.99	30.61	2.29
HDB200-PM26GX-K6	26	25.25	33.32	39.14	2.29
HDB200-PM44GX-K6	44	36.96	47.04	53.04	2.29
HDB200-PM62GX-K6	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB200-PF15GX-K6	15	16.33	24.99	30.61	2.29
HDB200-PF26GX-K6	26	24.66	33.32	39.14	2.29
HDB200-PF44GX-K6	44	38.38	47.04	53.04	2.29
HDB200-PF62GX-K6	62	54.84	63.50	69.32	2.41

HDB	200	P	X	XX	GX	K
HIGH DENSITY D- SUB	SERIES NO. 200	GENDER M: MALE F: FEMALE	PCB TYPE P: STRAIGHT TYPE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH Gf: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL	MOUNTING TYPE K: WITH #4-40UNC IN THE REAR SHELL USE RIVET AS BOARDLOCK

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 5 AMP
CONTACT RESISTANCE: 15M OHM MAX.
INSULATION RESISTANCE: 5000 OHM MIN. AT 500V DC
DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V OHMS.
OPERATING TEMPERATURE:-55°C- +105°C

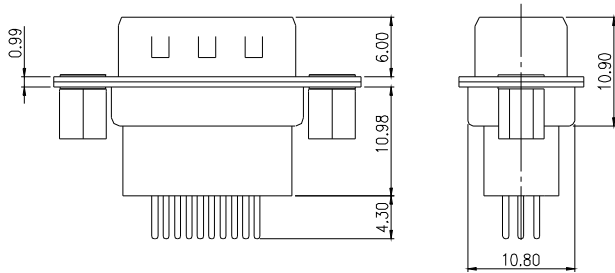
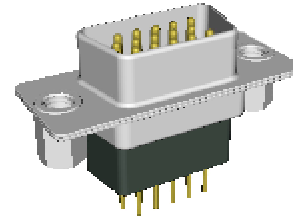
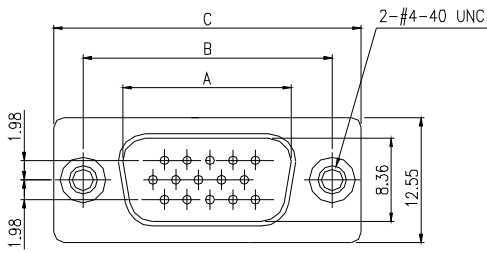
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
SHELL: COLD ROLLER STEEL
CONTACTS: PHOSPHOR BRONZE

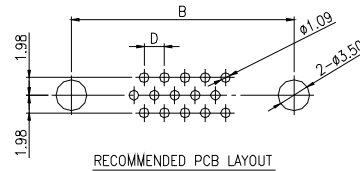
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 210 SERIES - MOUNTING TYPE I STRAIGHT TYPE - P

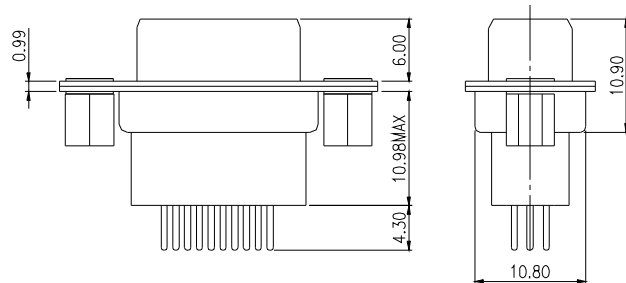
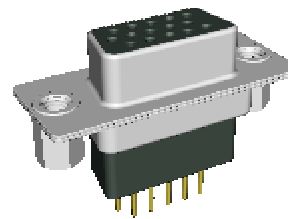
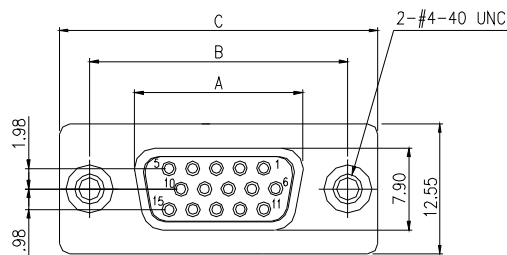
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PM15GX-I	15	16.92	24.99	30.61	2.29
HDB210-PM26GX-I	26	25.25	33.32	39.14	2.29
HDB210-PM44GX-I	44	36.96	47.04	53.04	2.29
HDB210-PM62GX-I	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PF15GX-I	15	16.33	24.99	30.61	2.29
HDB210-PF26GX-I	26	24.66	33.32	39.14	2.29
HDB210-PF44GX-I	44	38.38	47.04	53.04	2.29
HDB210-PF62GX-I	62	54.84	63.50	69.32	2.41

HDB	210	-	P	X	XX	GX	-	I
HIGH DENSITY D- SUB	SERIES NO. 210		PCB TYPE. P: STRAIGHT TYPE	GENDER M: MALE F: FEMALE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH GfI: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL		MOUNTING TYPE I: WITH #4-40UNO HEX NUT IN THE REAR OF THE SHELL

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE:-55°C~ +105°C

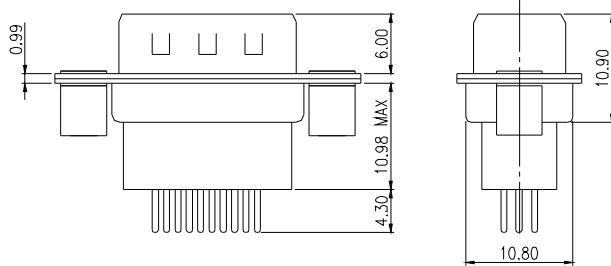
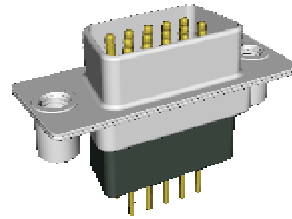
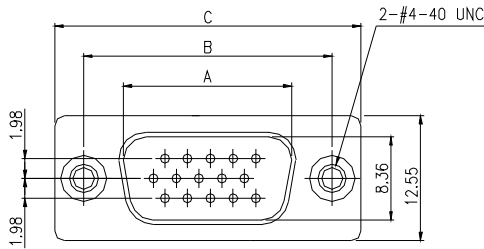
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

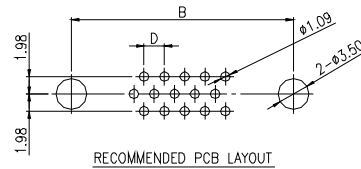
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 210 SERIES - MOUNTING TYPE J STRAIGHT TYPE - P

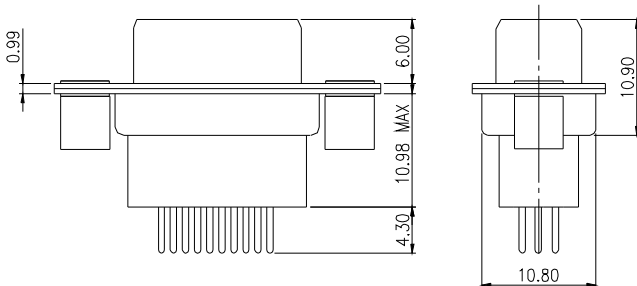
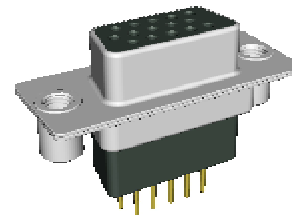
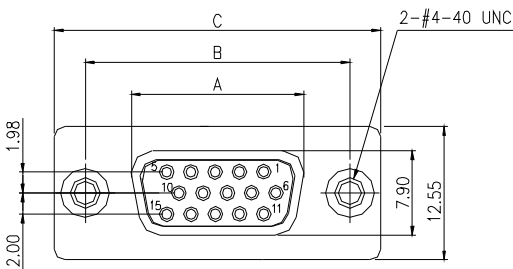
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PM15GX-J	15	16.92	24.99	30.61	2.29
HDB210-PM26GX-J	26	25.25	33.32	39.14	2.29
HDB210-PM44GX-J	44	36.96	47.04	53.04	2.29
HDB210-PM62GX-J	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PF15GX-J	15	16.33	24.99	30.61	2.29
HDB210-PF26GX-J	26	24.66	33.32	39.14	2.29
HDB210-PF44GX-J	44	38.38	47.04	53.04	2.29
HDB210-PF62GX-J	62	54.84	63.50	69.32	2.41

HDB	210	-	P	X	XX	GX	-	J
HIGH DENSITY D- SUB	SERIES NO. 210		PCB TYPE. P: STRAIGHT TYPE	GENDER M: MALE F: FEMALE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH Gf1: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL		MOUNTING TYPE J: WITH #4-40UNC ROUND NUT IN THE REAR OF THE SHELL

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE: -55°C~ +105°C

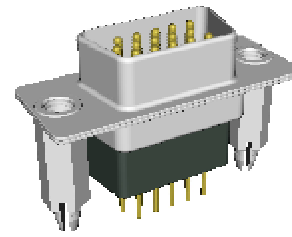
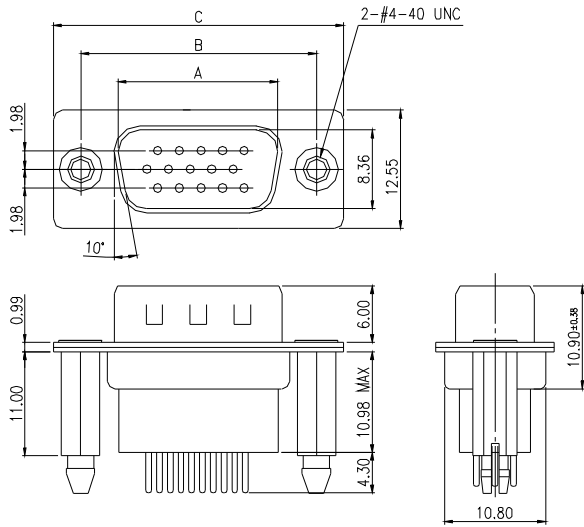
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

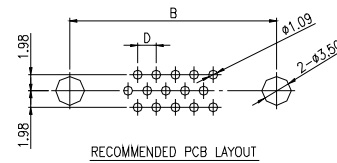
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 210 SERIES - MOUNTING TYPE K STRAIGHT TYPE - P

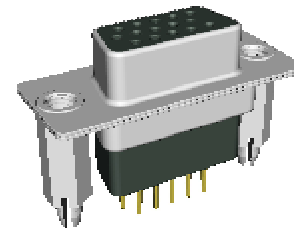
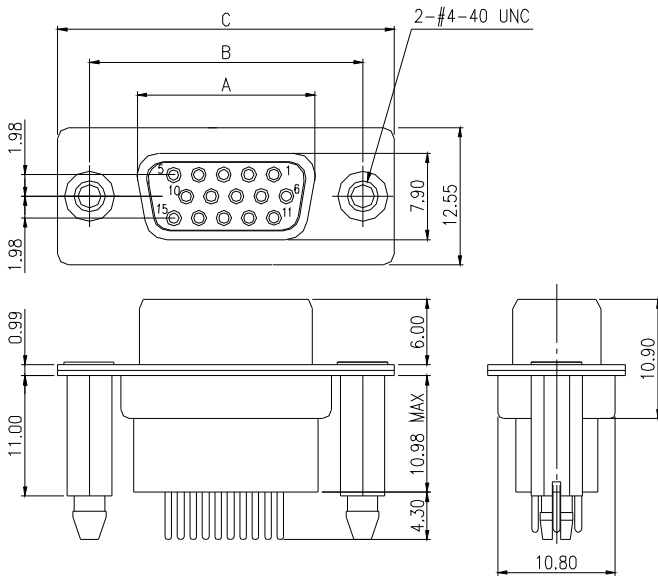
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PM15GX-K	15	16.92	24.99	30.61	2.29
HDB210-PM26GX-K	26	25.25	33.32	39.14	2.29
HDB210-PM44GX-K	44	36.96	47.04	53.04	2.29
HDB210-PM62GX-K	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PF15GX-K	15	16.33	24.99	30.61	2.29
HDB210-PF26GX-K	26	24.66	33.32	39.14	2.29
HDB210-PF44GX-K	44	38.38	47.04	53.04	2.29
HDB210-PF62GX-K	62	54.84	63.50	69.32	2.41

HDB	210	-	P	X	XX	GX	-	K
HIGH DENSITY D- SUB	SERIES NO. 210		GENDER M: MALE F: FEMALE	PCB TYPE. P: STRAIGHT TYPE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH Gf1: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15i: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30i: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL		MOUNTING TYPE K: WITH #4-40UNC IN THE REAR SHELL USE RVET AS BOARDLOCK

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE: -55°C ~ +105°C

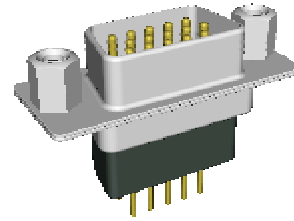
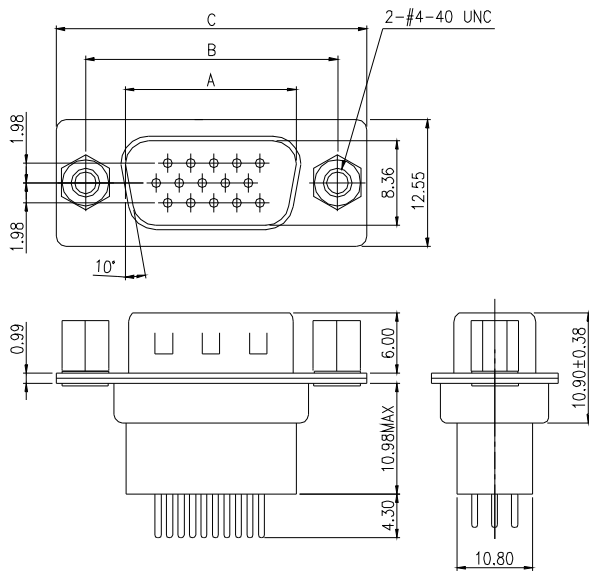
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

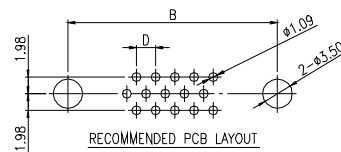
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 210 SERIES - MOUNTING TYPE L STRAIGHT TYPE - P

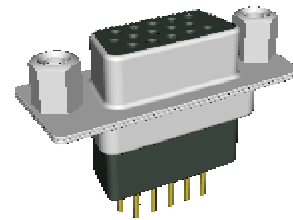
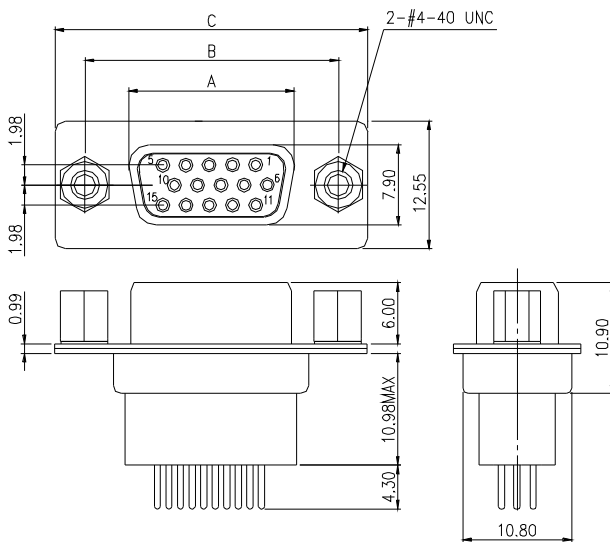
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PM15GX-L	15	16.92	24.99	30.61	2.29
HDB210-PM26GX-L	26	25.25	33.32	39.14	2.29
HDB210-PM44GX-L	44	36.96	47.04	53.04	2.29
HDB210-PM62GX-L	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PF15GX-L	15	16.33	24.99	30.61	2.29
HDB210-PF26GX-L	26	24.66	33.32	39.14	2.29
HDB210-PF44GX-L	44	38.38	47.04	53.04	2.29
HDB210-PF62GX-L	62	54.84	63.50	69.32	2.41

HDB	210	-	P	X	XX	GX	-	L
HIGH DENSITY D- SUB	SERIES NO. 210		PCB TYPE. P: STRAIGHT TYPE	GENDER M: MALE F: FEMALE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH Gft: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL		MOUNTING TYPE L: WITH #4-40UNC IN HEX NUT IN THE FRONT OF THE SHELL

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE:-55°C - +105°C

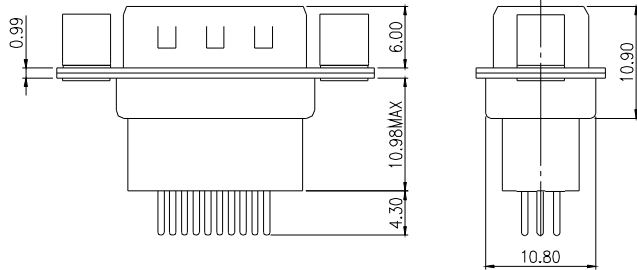
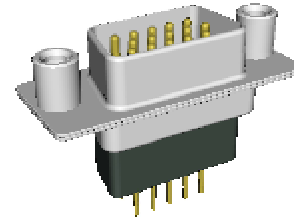
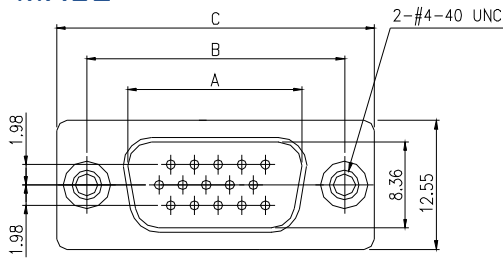
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

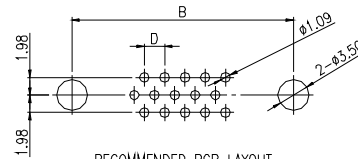
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 210 SERIES - MOUNTING TYPE M STRAIGHT TYPE - P

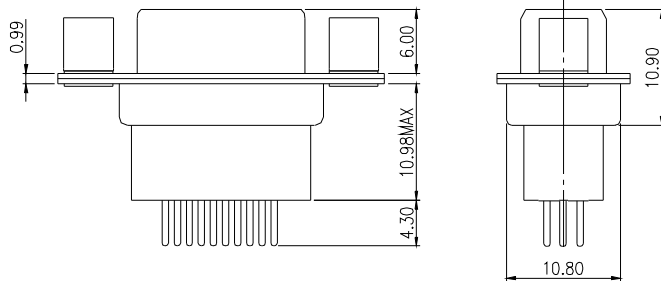
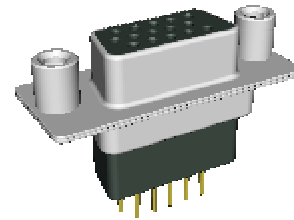
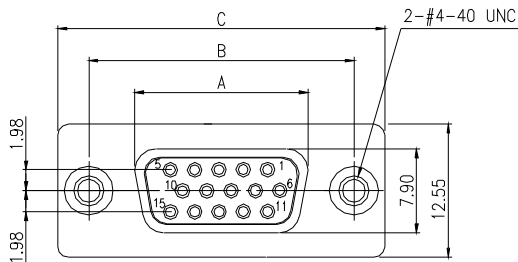
MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PM15GX-M	15	16.92	24.99	30.61	2.29
HDB210-PM26GX-M	26	25.25	33.32	39.14	2.29
HDB210-PM44GX-M	44	36.96	47.04	53.04	2.29
HDB210-PM62GX-M	62	55.42	63.50	69.32	2.41



FEMALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB210-PF15GX-M	15	16.33	24.99	30.61	2.29
HDB210-PF26GX-M	26	24.66	33.32	39.14	2.29
HDB210-PF44GX-M	44	38.38	47.04	53.04	2.29
HDB210-PF62GX-M	62	54.84	63.50	69.32	2.41

HDB	210	P	X	XX	GX	M
HIGH DENSITY D- SUB	SERIES NO. 210	PCB TYPE. P: STRAIGHT TYPE	GENDER M: MALE F: FEMALE	NO. OF CONTACT 15, 26, 44, 62	CONTACT PLATING OPTION Gf: GOLD FLASH Gf1: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL	MOUNTING TYPE M: WITH #4-40UNO ROUND NUT IN THE FRONT OF THE SHELL

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE: -55°C - +105°C

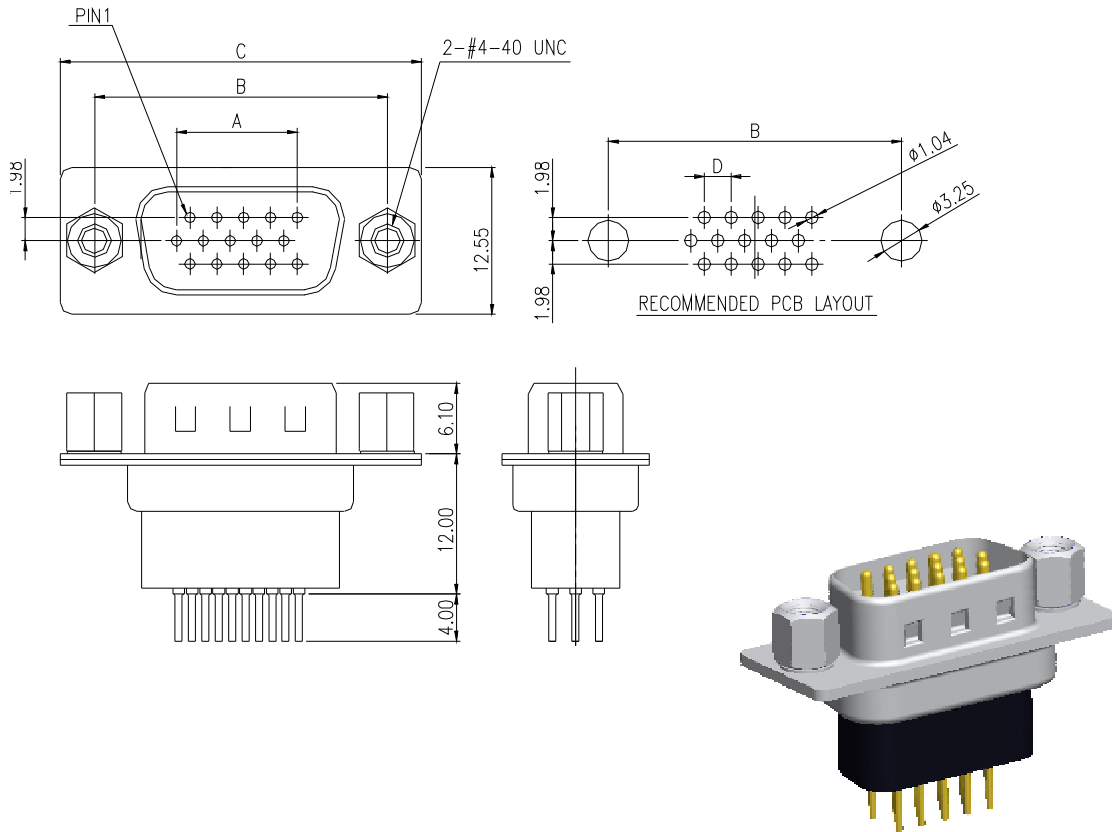
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

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

HDB 230 SERIES - MOUNTING TYPE L STRAIGHT TYPE - P

MALE



PART NO.	NO. OF CONTACT	DIMENSIONS			
		A	B	C	D
HDB230-PM15GX-LS	15	10.29	24.99	30.84	2.29
HDB230-PM26GX-LS	26	19.43	33.32	39.24	2.29

HDB **230** - **P** **M** **XX** **GX** - **LS**

HIGH DENSITY
D- SUB

SERIES NO.
230

PCB TYPE.
P: STRAIGHT TYPE

GENDER
M: MALE

NO. OF CONTACT
15, 26

CONTACT PLATING OPTION

Gf: GOLD FLASH
Gft: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL
G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

MOUNTING TYPE

L: WITH #4-40UNC IN HEX NUT
IN THE FRONT OF THE SHELL
S: SOLID PIN

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 2 AMP
CONTACT RESISTANCE: 10 M OHM MAX.
INSULATION RESISTANCE: 5000 M OHM MIN. AT 500V DC
DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
OPERATING TEMPERATURE: -55°C ~ +125°C

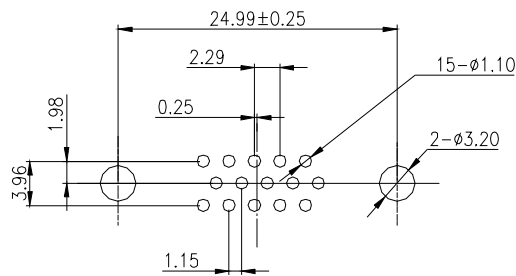
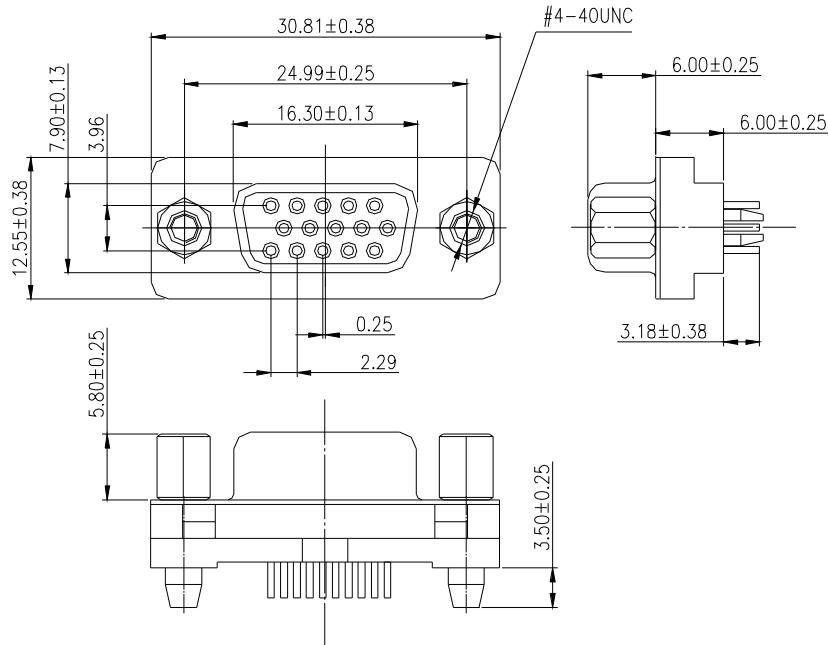
MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
SHELL: STEEL, TIN PLATED
CONTACTS: GOLD FLUSH

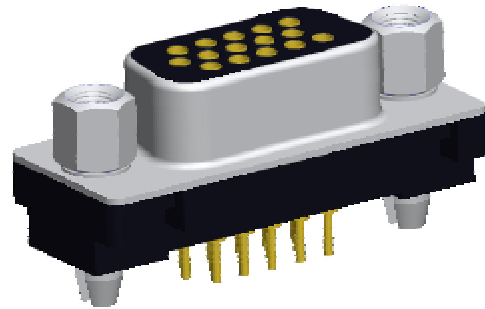
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

HDB 250 SERIES - MOUNTING TYPE LK STRAIGHT TYPE - P

FEMALE



PC BOARD LAYOUT



HDB	250	-	P	F	XX	GX	-	LK
HIGH DENSITY D- SUB	SERIES NO. 250		PCB TYPE. P: STRAIGHT TYPE	GENDER F: FEMALE	NO. OF CONTACT 15	CONTACT PLATING OPTION Gf: GOLD FLASH Gf: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL G15: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL G30: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL		MOUNTING TYPE L: WITH #4-40UNC IN HEX NUT IN THE FRONT OF THE SHELL K: WITH #4-40UNC IN THE REAR SHELL USE RIVET AS BOARDLOCK

ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 3 AMP
 CONTACT RESISTANCE: 25 M OHM MAX.
 INSULATION RESISTANCE: 5000 OHM MIN. AT 500V DC
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V / MIN. R.M.S
 OPERATING TEMPERATURE:-55°C~ +105°C

MATERIALS

INSULATOR: P.B.T. UL 94V-0 RATED
 SHELL: COLD ROLLER STEEL
 CONTACTS: BRASS

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