

RECOMMENDED P.C.B LAYOUT (TOP VIEW)  
TOLERANCES: ±0.05mm

POSITION	A	B	C	D	E	F	G
15M	16.92	25.00	30.8	2.29	1.14	19.2	7.04
26M	25.25	33.30	39.2	2.29	1.14	27.7	6.88
44M	38.96	47.10	53.1	2.29	1.14	41.1	6.88
62M	55.42	63.50	69.4	2.41	1.20	57.3	7.00

**SPECIFICATION**

**MATERIAL**

Insulator: Thermal Plastic UL94V-0  
Contacts: Copper Alloy  
Shell: Steel  
Rivet, Boardlock: Copper Alloy

**CONTACT PLATING**

Underplate: 50u"~100u" Nickel  
Contact Area: 1u"~30u" Selective Gold  
Solder Tails Area: 100u"~200u" Tin/Lead or 100u"~200u" Tin(Lead Free)

**ELECTRICAL**

Operation Voltage: 250 VAC Max.  
Current Rating: 3 Amps Max.  
Contact Resistance: 15 mohms Max.  
Insulation Resistance: 3000 Mohms Min @ 500 VDC  
Dielectric Withstanding Voltage: 1000 VAC / Minute  
Temperature Range: -55°C To +105°C

**PART NO.**

102 A X XX X X X A A A X  
1 2 3 4 5 6 7 8 9 10 11

**1.SERIES NO.**

2.TYPE: A=Standard

**3.ENVIRONMENT PROTECTION MATERIAL:**

--General  
J=SONY SS-00259(Reserved)  
K=SONY SS-00259(Matte Tin)  
(Reserved)

E=RoHS

F=RoHS(Matte Tin)

**4.CONTACT NUMBER:**

15 26 44 62

**5.CONTACT TYPE:**

M=Male

**6.CONTACT AREA PLATING:**

G=Gold Flash  
S=Gold Flash (Selective)  
A=5u" Gold (Selective)  
B=10u" Gold (Selective)  
C=15u" Gold (Selective)  
D=30u" Gold (Selective)

**7.SHELL PLATING:**

P=Tin Plated+Dimple  
Q=Nickel Plated+Dimple

**8.PROCESS OPTION:**

Z=Zinc Plated

**9.PARTS OPTION:**

A=Non Accessories

**10.PARTS DIMENSION**

A=Fully Loaded

**11.INSULATOR:**

1=White  
2=Blue  
3=Black  
4=Gray



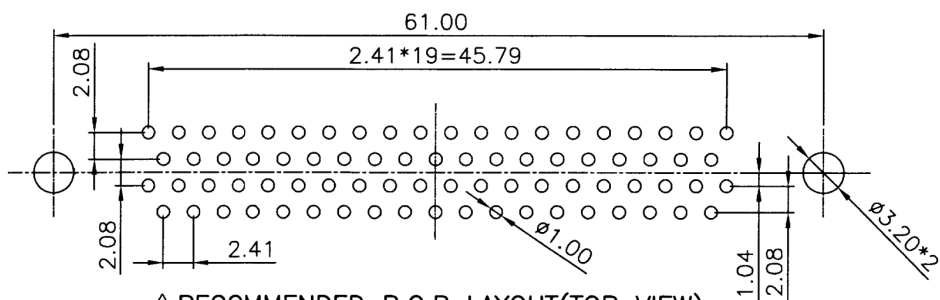
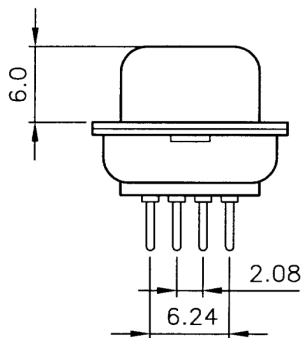
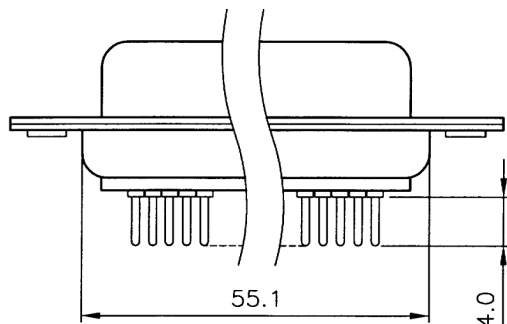
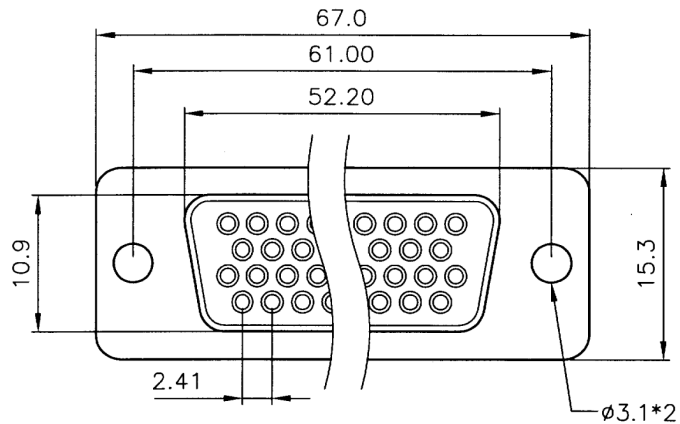
UNLESS OTHERWISE SPECIFIED TOLERANCE  
ANG. ±5  
0 ±0.5  
.0 ±0.3  
.00 ±0.2

SCALE: AS SHOWN UNIT: mm

**MC-COMPONENTS**

REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	ECN-0508112(Alex) (2,B)(7,F)(7,E)(7,B)	08/16/05			
B	ECN-0102088	02/22/01	E	ECN-0803023(Kitty) (7,D)	03/03/08
A		05/02/97	D	ECN-0602006(Lily) (9,E)	01/26/06

DRAWN	PEARL	03/04/08	DRAWN NAME:	HIGH DENSITY D-SUB PCB
CHECKED	Rita	03/05/08	PRODUCT NO.	102AXXXXXXAAAX
APPROVED	Joe	03/05/08	FILE NAME:	102AKXXMXXAAAX
SIZE	A4	REV.	E	



△ RECOMMENDED P.C.B LAYOUT(TOP VIEW)  
TOLERANCES: ±0.05mm

**SPECIFICATION**

**MATERIAL**

△ Insulator: Thermal Plastic UL94V-0  
Contacts: Copper Alloy  
Shell: Steel

Rivet, Boardlock: Copper Alloy

**CONTACT PLATING**

Underplate: 50u"~100u" Nickel

Contact Area: 1u"~30u" Selective Gold

Solder Tails Area: 100u"~200u" Tin/Lead(Brighten Tin) or

100u"~200u" Tin/Lead Free(Brighten Tin/Matte Tin)

**ELECTRICAL**

Operation voltage: 250 VAC max.

Current rating: 3 Amps max.

Contact resistance: 15 mohms max.

Insulation resistance: 3000 Mohms min @ 500 VDC

Dielectric withstanding voltage: 1000 VAC / minute

Temperature Range: -55°C TO +105°C

Part no.

102 A X 78 E X X A A A X  
1 2 3 4 5 6 7 8 9 10 11

1.SERIES NO.

2.TYPE: A=Standard

△ 3.ENVIRONMENT PROTECTION

**MATERIAL:**

--General

J=SONY SS-00259(Reserved)

K=SONY SS-00259(Matte Tin)

(Reserved)

E=RoHS

F=RoHS(Matte Tin)

4.CONTACT NUMBER:

78

5.CONTACT TYPE:

F=Female

6.CONTACT AREA PLATING:

G=Gold Flash

S=Gold Flash (Selective)

A=5u" Gold (Selective)

B=10u" Gold (Selective)

C=15u" Gold (Selective)

D=30u" Gold (Selective)

H=1u" gold flash and

30u" on contact area

M=2u" gold

(selective gold flash)

7.SHELL PLATING:

T=Tin plated

N=Nickel plated

Z=Zinc (chromatic)

8.PROCESS OPTION:

A=THRU. HOLE

9.PARTS OPTION:

A=NON ACCESSORIES

10.PARTS DIMENSION

A=FULLY LOADED

11.INSULATOR:

1=WHITE

2=BLUE

3=BLACK

4=GREY



UNLESS OTHERWISE SPECIFIED TOLERANCE	
ANG.	±5°
0.	±0.5
.0	±0.3
.00	±0.2

SCALE: AS SHOWN UNIT: mm

**MC-COMPONENTS**

REV.	DESCRIPTION	DATE	SIZE	REV.	FILE NAME:
A	ECN-0707089(Chichi) △ (2,B)(7,E)(7,G)	07/09/07	A4	C	102AX78FXXAAAX
B	ECN-0102088	02/22/01			102AK78FXXAAAX
A		05/22/97			

DRAWN PEARL 07/11/07

CHECKED Joe 07/11/07

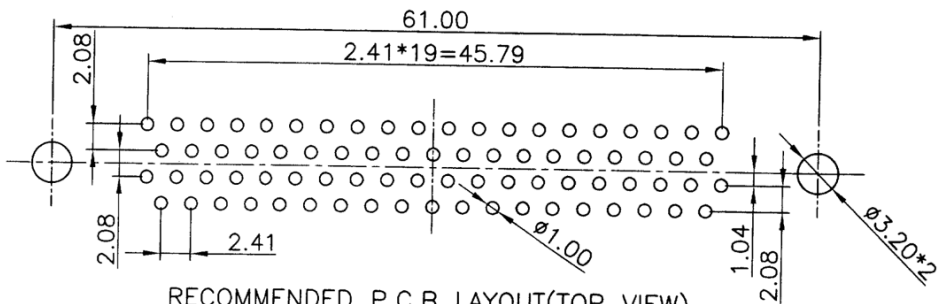
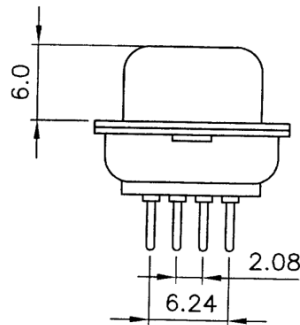
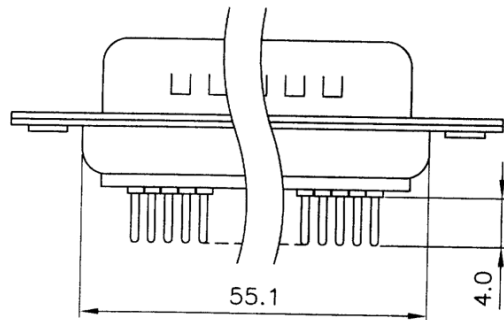
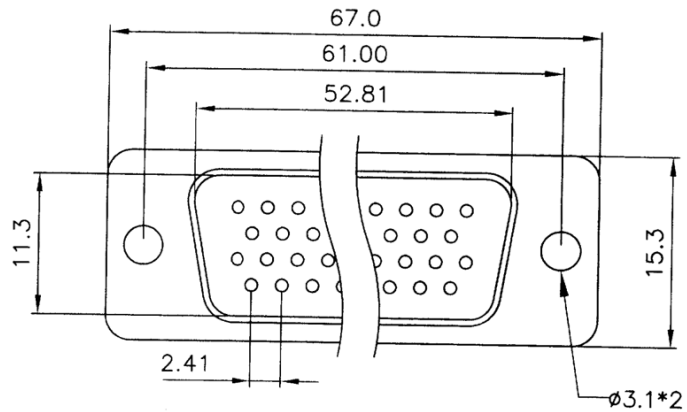
APPROVED [Signature] 07/12/07

DRAWN NAME: HIGH DENSITY D-SUB PCB

STRAIGHT POSTED

PRODUCT NO. 102AX78FXXAAAX

FILE NAME: 102AK78FXXAAAX



RECOMMENDED P.C.B LAYOUT(TOP VIEW)  
 Δ TOLERANCES: ±0.05mm

**SPECIFICATION**

**MATERIAL**  
 Δ Insulator: Thermal Plastic UL94V-0  
 Contacts: Copper Alloy  
 Shell: Steel  
 Rivet, Boardlock: Copper Alloy  
**CONTACT PLATING**  
 Underplate: 50u" Nickel  
 Contact Area: 1u"~30u" Selective Gold  
 Solder Tails Area: 100u"~200u" Tin/Lead(Brighten Tin) or  
 100u"~200u" Tin/Lead Free(Brighten Tin/Matte Tin)

**ELECTRICAL**  
 Operation Voltage: 250 VAC Max.  
 Current Rating: 3 Amps Max.  
 Contact Resistance: 15 mohms Max.  
 Insulation Resistance: 3000 Mohms Min @ 500 VDC  
 Dielectric Withstanding Voltage: 1000 VAC / Minute  
 Operating Temperature: -55°C To +105°C  
 Part no.

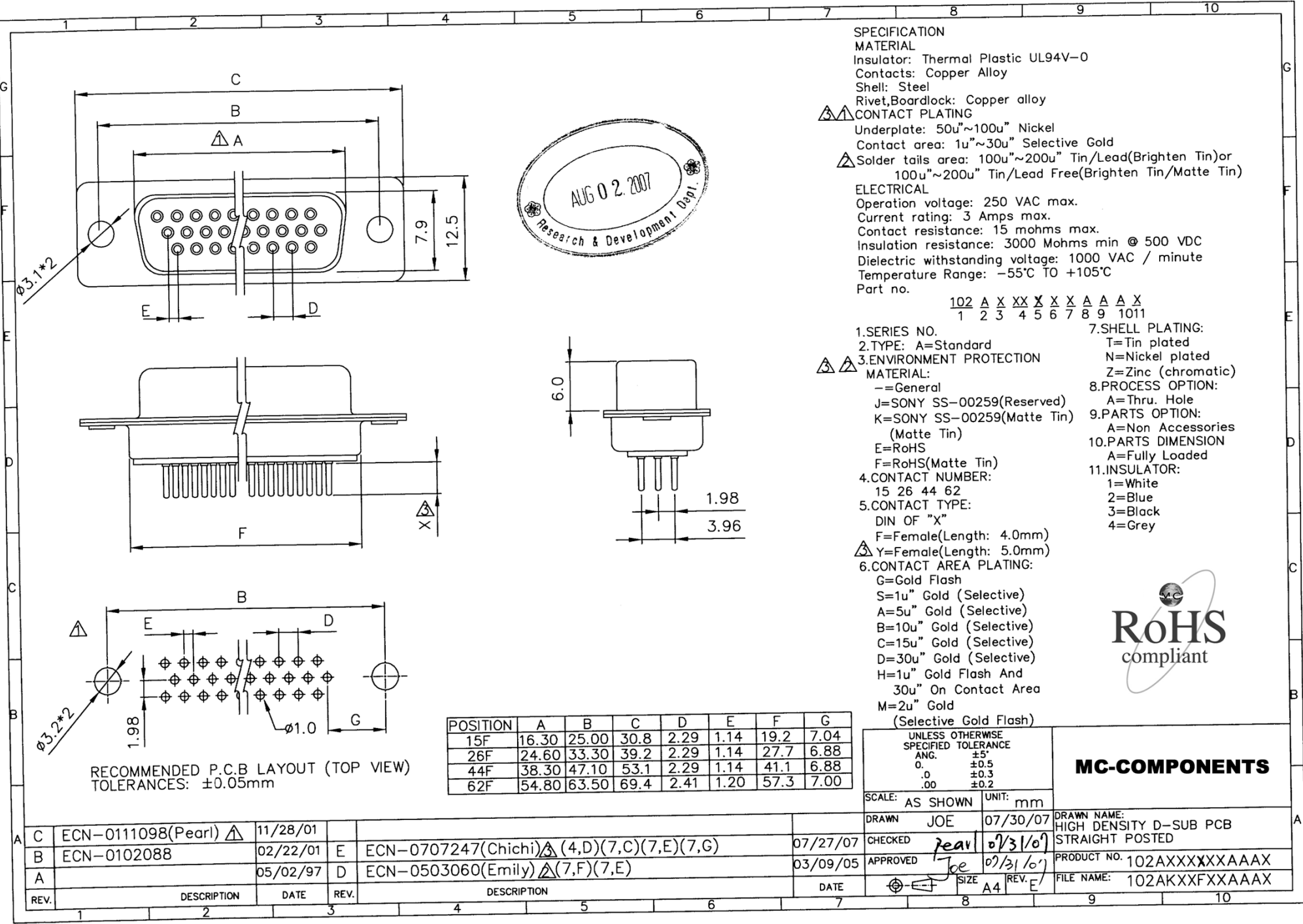
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- 1. SERIES NO.
- 2. TYPE: A=Standard
- 3. ENVIRONMENT PROTECTION MATERIAL:  
 --General  
 J=SONY SS-00259(Reserved)  
 K=SONY SS-00259(Matte Tin)  
 (Reserved)  
 E=RoHS  
 F=RoHS(Matte Tin)
- 4. CONTACT NUMBER:  
 78
- 5. CONTACT TYPE:  
 M=Male
- 6. CONTACT AREA PLATING:  
 G=Gold flash  
 S=Gold flash (selective)  
 A=5u" gold (selective)  
 B=10u" gold (selective)  
 C=15u" gold (selective)  
 D=30u" gold (selective)  
 H=1u" gold flash and  
 30u" on contact area  
 M=2u" gold  
 (selective gold flash)
- 7. SHELL PLATING:  
 P=Tin plated+dimple  
 Q=Nickel plated+dimple
- 8. PROCESS OPTION:  
 A=THRU. HOLE
- 9. PARTS OPTION:  
 A=NON ACCESSORIES
- 10. PARTS DIMENSION  
 A=FULLY LOADED
- 11. INSULATOR:  
 1=WHITE  
 2=BLUE  
 3=BLACK  
 4=GREY



UNLESS OTHERWISE SPECIFIED TOLERANCE		<b>MC-COMPONENTS</b>
ANG.	±5°	
0.	±0.5	
.0	±0.3	
.00	±0.2	
SCALE:	AS SHOWN	UNIT: mm
DATE	DRAWN	DATE
02/02/07	PEARL	02/07/07
02/22/01	CHECKED	DATE
	Jpe	02/09/07
05/02/97	APPROVED	DATE
	Mark	02/09/07
REV.	DESCRIPTION	PRODUCT NO.
1		102AX78MXXAAAX
2		FILE NAME:
3		102AK78MXXAAAX

A	C	ECN-0702042(Lillian) Δ (2,B)(7,E)(7,G)	02/02/07	DRAWN	PEARL	02/07/07	DRAWN NAME:	HIGH DENSITY D-SUB PCB
B		ECN-0102088	02/22/01	CHECKED	Jpe	02/09/07	STRAIGHT POSTED	
A			05/02/97	APPROVED	Mark	02/09/07	PRODUCT NO.	102AX78MXXAAAX
REV.		DESCRIPTION	DATE	SIZE	A4	REV.	FILE NAME:	102AK78MXXAAAX



**SPECIFICATION**  
**MATERIAL**  
 Insulator: Thermal Plastic UL94V-0  
 Contacts: Copper Alloy  
 Shell: Steel  
 Rivet, Boardlock: Copper alloy  
 CONTACT PLATING  
 Underplate: 50u"~100u" Nickel  
 Contact area: 1u"~30u" Selective Gold  
 Solder tails area: 100u"~200u" Tin/Lead(Brighten Tin) or 100u"~200u" Tin/Lead Free(Brighten Tin/Matte Tin)  
**ELECTRICAL**  
 Operation voltage: 250 VAC max.  
 Current rating: 3 Amps max.  
 Contact resistance: 15 mohms max.  
 Insulation resistance: 3000 Mohms min @ 500 VDC  
 Dielectric withstanding voltage: 1000 VAC / minute  
 Temperature Range: -55°C TO +105°C  
 Part no.

102 A X XX X X X A A A X  
 1 2 3 4 5 6 7 8 9 10 11

- 1. SERIES NO.
- 2. TYPE: A=Standard
- 3. ENVIRONMENT PROTECTION MATERIAL:  
 --=General  
 J=SONY SS-00259(Reserved)  
 K=SONY SS-00259(Matte Tin) (Matte Tin)  
 E=RoHS  
 F=RoHS(Matte Tin)
- 4. CONTACT NUMBER:  
 15 26 44 62
- 5. CONTACT TYPE:  
 DIN OF "X"  
 F=Female(Length: 4.0mm)  
 Y=Female(Length: 5.0mm)
- 6. CONTACT AREA PLATING:  
 G=Gold Flash  
 S=1u" Gold (Selective)  
 A=5u" Gold (Selective)  
 B=10u" Gold (Selective)  
 C=15u" Gold (Selective)  
 D=30u" Gold (Selective)  
 H=1u" Gold Flash And 30u" On Contact Area  
 M=2u" Gold (Selective Gold Flash)
- 7. SHELL PLATING:  
 T=Tin plated  
 N=Nickel plated  
 Z=Zinc (chromatic)
- 8. PROCESS OPTION:  
 A=Thru. Hole
- 9. PARTS OPTION:  
 A=Non Accessories
- 10. PARTS DIMENSION:  
 A=Fully Loaded
- 11. INSULATOR:  
 1=White  
 2=Blue  
 3=Black  
 4=Grey



POSITION	A	B	C	D	E	F	G
15F	16.30	25.00	30.8	2.29	1.14	19.2	7.04
26F	24.60	33.30	39.2	2.29	1.14	27.7	6.88
44F	38.30	47.10	53.1	2.29	1.14	41.1	6.88
62F	54.80	63.50	69.4	2.41	1.20	57.3	7.00

RECOMMENDED P.C.B LAYOUT (TOP VIEW)  
 TOLERANCES: ±0.05mm

UNLESS OTHERWISE SPECIFIED TOLERANCE  
 ANG. ±5°  
 0. ±0.5  
 .0 ±0.3  
 .00 ±0.2

**MC-COMPONENTS**

REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE	SIZE	REV.	FILE NAME:
C	ECN-0111098(Pearl)	11/28/01				A4	E	102AKXXFXXAAAX
B	ECN-0102088	02/22/01	E	ECN-0707247(Chichi)	07/27/07			102AKXXFXXAAAX
A		05/02/97	D	ECN-0503060(Emily)	03/09/05			102AKXXFXXAAAX

SCALE: AS SHOWN UNIT: mm  
 DRAWN: JOE 07/30/07  
 CHECKED: Pearl 07/31/07  
 APPROVED: Joe 07/31/07  
 DRAWN NAME: HIGH DENSITY D-SUB PCB STRAIGHT POSTED  
 PRODUCT NO. 102AKXXFXXAAAX  
 FILE NAME: 102AKXXFXXAAAX