



RECOMMENDED P.C.B. LAYOUT

* This part is RoHS compliant

TOLERANCE	
LINEAR	ANGLES
X ±	X° ±
.X ± 0.40	.X° ±
.XX ± 0.30	.XX° ±
.XXX ± 0.20	.XXX° ±



TITLE: D-SUB 15 FEMALE HIGH DENSITY /USB A TYPE CONNECTOR

PART NO. DSUR-2031-AK13T1

DWG NO. GTI09-30001

[A]	ISSUED	AXL	1/7/09'	.XX ± 0.30	.XX° ±	APPD:	MAT'L:	UNITS	SCALE	SHEET	REV
REV	ECN NO.	NAME	DATE	.XXX ± 0.20	.XXX° ±	CHKD:	FINISH:				
				.XXX ± 0.20	.XXX° ±	DRWN: AXL	Q'TY:				

SPECIFICATIONS

1:D-SUB

1.1:ELECTRICAL CHARACTERISTICS:

Contact Current Rating:3 Amperes.
Dielectric Withstanding Voltage: AC 1000/60sec.r.m.s.
Insulation Resistance:5000 Megohms Minimum.at DC 500V.
Contact Resistance:25 Milliohms Maximum.
Operating Temperature:-55° C to+105° C.

1.2:MECHANICAL CHARACTERISTICS:

Contact Insertion Force:341 g.Maximum.
Contact Separation Force:21 g.Minimum.

1.3:MATERIALS:

Contacts:Brass.
Insulator: PBT UL 94V-0 Rated.
Shell:Cold Roller Steel.

1.4:FINISHES:

Contact:Gold Flash.
Shell:Nickel Plated.

2:USB

2.1:ELECTRICAL CHARACTERISTICS:

Contact Current Rating:1Amperes.
Dielectric Withstanding Voltage: AC 750/60sec.r.m.s.
Insulation Resistance: 1000 Megohms Minimum
Contact Resistance: 25 Milliohms Maximum.
Operating Temperature: -40° C to+60° C.

2.2:MECHANICAL CHARACTERISTICS:

Mating Force: 3.5 Kg.Maximum.
Unmating Force: 1 Kg.Minimum.

2.3:MATERIALS:

Contacts: Phosphorous Bronze,C5191R-H
Insulator: PBT,UL 94V-0 Rated.
Front Shell: Brass ,C2680-H
Brack Shell: Spcc.
Sprint Shell: Brass ,C2680-H

2.4:FINISHES:

Contact:Gold Flash.
Front Shell: 120u" MIN TIN,50~100u" Nickel
Brack Shell: 100u" Nickel
Spring Shell: 100u" Nickel

3.SPACING BETWEEN PORTS TYPE C-C (PROFILE): 3.22mm.

4.COLOR STYLE: FOR PC99 FOLLOW PANTONE COLOR.

ORDER INFORMATION

DSUR- 20 31 - A K 1 3 T 1

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1. CONNECTOR:

DSUR: D-SUB + USB R/A CONNECTOR

2. TYPE:

20: FEMALE, DIP TYPE, D-SUB 15PIN + 2x2 USB A TYPE

3. POSITIONS

31: 31 POSITIONS

4. INSULATOR MATERIAL

A: PBT

5. INSULATOR COLOR

K: BLACK

6. CONTACT PLATING

1: GOLD FLASH

7. SHIELD PLATING

3: NICKEL



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SHEET

REVISION

DWG NO.

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