

REFERENCE SPECIFICATIONS

- DIN 41652
- MIL-DTL-24308

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL:
- PBT COLOR BLACK-RAL 7001/STANDARD MATERIAL
- CONTACT MATERIAL: - PHOSPHOR BRONZE FOR STRAIGHT CONTACT AND RA SOCKET
- BRASS FOR RA PIN
- GROUNDING DEVICE MATERIAL : - BRASS FOR RIGHT ANGLE CONTACT

ELECTRICAL CHARACTERISTICS

- MAXIMUM RATING CURRENT: 5A AT 70°C
- NOMINAL CURRENT: 5A (STANDARD CONDITIONS)
- CONTACT RESISTANCE : straight terminations: <10mW
Right angled termination: <25mΩ
: <35mΩ for 50 way
- VOLTAGE PROOF : >1000 V.r.m.s.
- RATED VOLTAGE : 300 V.r.m.s.
- insulation resistance: >5000mΩ
- creepage and clearance distance: >1mm
- average wiping length: 2mm

MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum
- Female screw lock: 0.5 N.m minimum
- INSERTION AND WITH DRAWAL FORCE: <n x 3.40 N (n number of cts)
- GAUGE RETENTION FORCE : >0.20 N (gauge PM)
- THICKNESS GAUGE = $\varnothing 0.99 \pm 0.005$ / SURFACE ROUGHNESS:
• Ra=0.10μ mini- 0.25μ maxi
- CONTACT RETENTION IN INSULATOR : mini 16N for straight contact
mini 20N for right angled contact
- VIBRATIONS: 10-2000Hz / 1.5 mm - 20g / 3 x 2 HRS
- INTERRUPTION <1μs (NOT APPLICABLE FOR PL3)
- SHOCK: ACC. HALF SINE 50g- 11m.s-6x3 SHOCKS
- INTERRUPTION <1μs
- HARPOON INSERTION FORCE: <60N

PERFORMANCE LEVELS

MECHANICAL ENDURANCE ONLY		
P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS	
4 200 OPERATIONS	PL3	
6 400 OPERATIONS	PL1	

MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST(1)		
P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS	
4 salt spray: 24 hours	PL3	
6 250 op + test (1 or 2)-10 days + 250 op	PL1	

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device

IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST IIg

MIXED GASES: H2S=10 PPB±5.10-9vol/vol +N2O=200±50.10-9 vol/vol + CL2=10±5.10-9vol/vol

TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±3°C

(2) INDUSTRIAL ATMOSPHERE TEST: 4 GASES available for contacts active area only

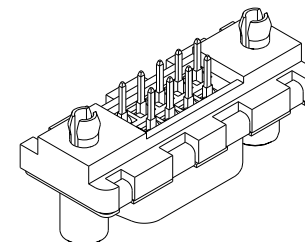
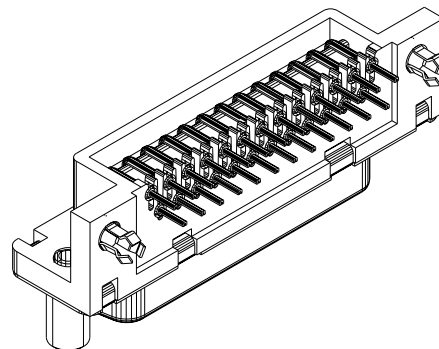
BELCORE TEST : MIXED GASES: H2S=10 PPB±5 vol/vol +N2O=200ppb±50 vol/vol + CL2=10ppb±3vol/vol + S2O=100ppb±30vol/vol
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±2°C

ENVIRONMENTAL CHARACTERISTICS

CLIMATIC CATEGORY: 55/125/56
TEMPERATURE RANGE -55°C TO +125°C
DAMP HEAT STEADY STATE 56 DAYS

RIGHT ANGLED

STRAIGHT



PLATING TIN LEAD VERSION

- CONTACT:
 - GOLD OVER NICKEL ON MATING SURFACES
 - TIN LEAD OVER NICKEL ON TERMINATION PARTS
- SHELL AND ACCESSORIES TIN LEAD OVER COPPER

PLATING TIN VERSION

NOTE RoHS INFORMATIONS

- The "LF" products meet European union Directives and other country regulations as described in GS-22-008
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6 mm minimum thickcircuit board. See application notes/procedures if they are available.
- Termination plating spec: 1.27μm Nickel mini, 2.5 to 7.5 μm Sn (pure matte)
- Shell plating: 2 to 4 μm Cu + 3 to 10 μ Sn (pure bright)
- Accessories: Sn pure bright
- Packaging spec: see GS-14-920

MECHANICAL ENDURANCE ONLY		
P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS	
4 200 OPERATIONS	PL3	
6 400 OPERATIONS	PL1	

MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST(1)		
P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS	
4 salt spray: 24 hours	PL3	
6 250 op + test (1 or 2)-10 days + 250 op	PL1	

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device

IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST IIg

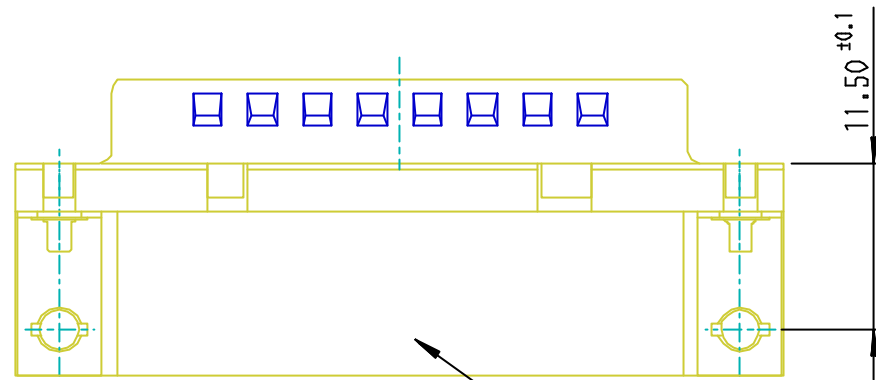
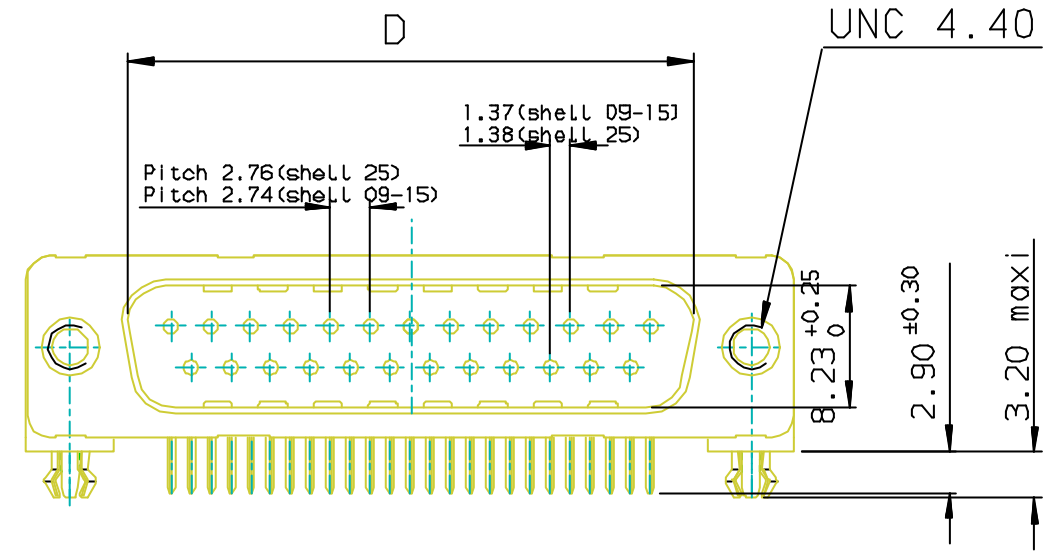
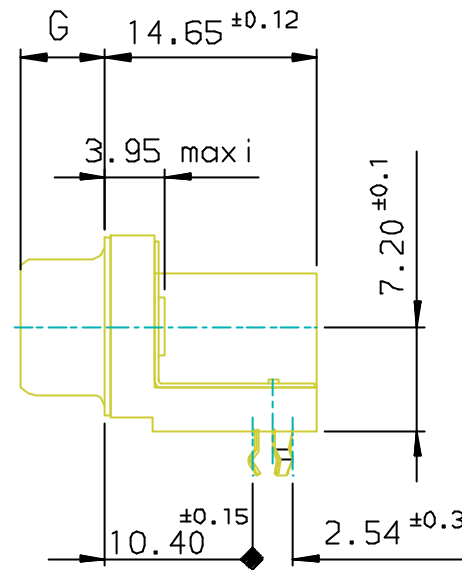
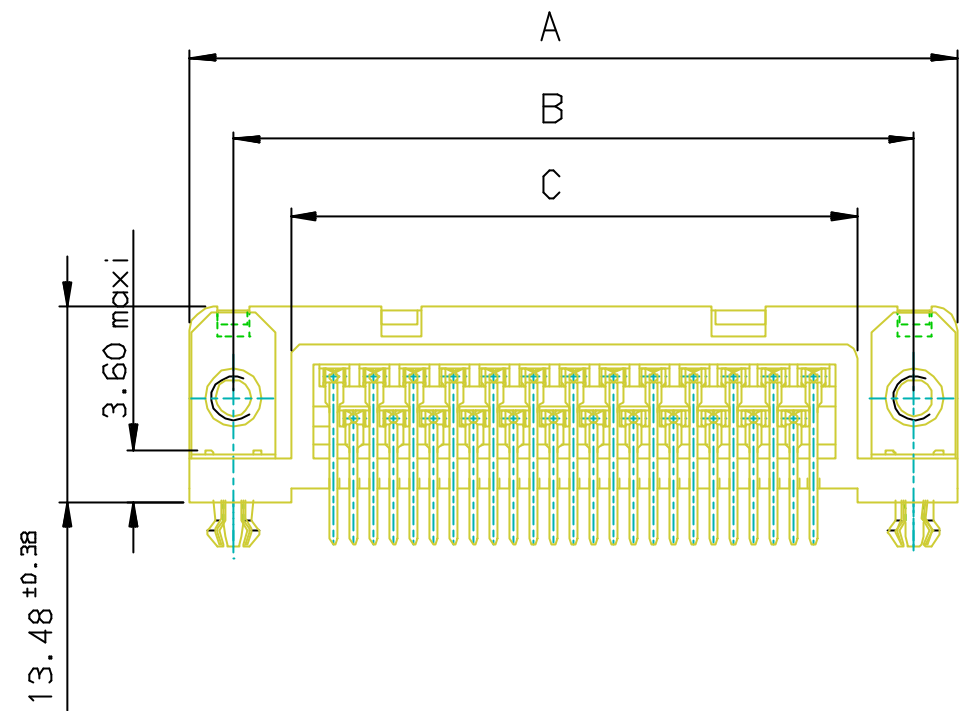
MIXED GASES: H2S=10 PPB±5.10-9vol/vol +N2O=200±50.10-9 vol/vol + CL2=10±5.10-9vol/vol

TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±3°C

(2) INDUSTRIAL ATMOSPHERE TEST: 4 GASES available for contacts active area only

BELCORE TEST : MIXED GASES: H2S=10 PPB±5 vol/vol +N2O=200ppb±50 vol/vol + CL2=10ppb±3vol/vol + S2O=100ppb±30vol/vol
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±2°C

A FCI		www.fciconnect.com	surface <input checked="" type="checkbox"/>	tolerance	projection	
Dr	JOUBERT	30/11/00	Product family	-	size A3	Scale 1:1
Eng			Spec ref			
Chr			Material	SEE NOTES	ECN	LS05-0039
Appr	LEGARE	30/11/00				
title	DELTA D SOLDER CTS CONNECTORS				dwg no	Rev.
ti	GENERAL CHARACTERISTICS				C01-8646-0000	C
catalog no					CUSTOMER COPY	sheet 1 of 1



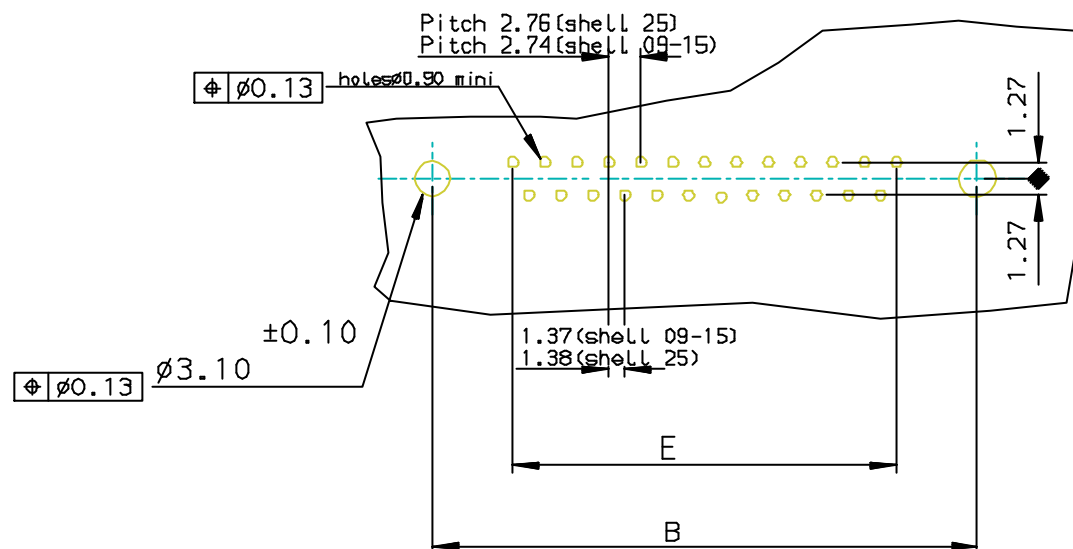
Part Number & Date Code Printing

PC card drilling dimensions(after plating)
(thickness 1.60±0.20mm)




Core range						
SHELL	A±0.38	B±0.12	C±0.10	D±0.25	G±0.25	PART NUMBER
09	30.81	24.99	16.96	16.79	5.90	D09P13A4GX00**
15	39.14	33.32	25.18	25.12	5.90	D15P13A4GX00**
25	53.03	47.04	39.12	38.84	5.70	D25P13A4GX00**

GENERAL CHARACTERISTICS , SEE DRAWING C01-8646-0000

LF FOR LEAD FREE



rev	ecn no	dr	date
J	[05-0124	JS	2005/07/27
K	[06-0074	SK	2006/06/08
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

www.fciconnect.com			surface ISO 1302		✓	tolerance std ISO 406 ISO 1101		projection 	mm 
TOLERANCES UNLESS OTHERWISE SPECIFIED									
Dr	JOHN SLEEBA	1994/08/01	ANGULAR	LINEAR	0.X	±0.1	size A3	Scale 1:1	
Eng	GEORGE VJ	1994/08/01			0.XX	±0.1			
Chr	GEORGE VJ	2005/07/27			0.XXX	±0.1			
Appr	KVSD	2005/07/27	0.XX° ±1°		0.XXX ±0.1		ECN -		
Product family			D-SUB				Spec ref -		
			title MALE CONNECT.DELTA D RIGHT ANGLED WITH NUT,HARPOON & METAL PLATE.				dwg no C01-8646-0281-1		Rev. K
catalog no			DELTA-D				CUSTOMER	sheet 1 of 1	