REFERENCE SPECIFICATIONS

- DIN-41612
- IEC-603-2

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL:
  - Polyester thermoplastic UL94V0 - Color grey
- CONTACT MATERIAL: -PHOSPHOR BRONZE : (FEMALE CONTACT)
  -PHOSPHOR BRONZE : (MALE CONTACT-SOLDER TAILS)

ELECTRICAL CHARACTERISTICS

- CURRENT RATING : 1.5A at 20°C / 1A at 70°C — 40A AT 20°C (power contact)
- MAXIMAL CURRENT: 2A
- CONTACT RESISTANCE ≤20mΩ — ≤1mΩ under 10 A (power contact)
- VOLTAGE PROOF: contact/contact 1000 V eff (0.5 mA / 50 Hz)
  contact/ground 1550 V eff (0.5 mA / 50 Hz)
- INSULATION RESISTANCE: $\geq 10^6$ MΩ
- CREEPAGE AND CLEARANCE DISTANCE: ≥1.2 mm
- WIPPING/PLUG IN DIRECTION: ≥1.8mm
- ALTERNATIF CURRENT V AC: 330 V
- DIRECT CURRENT V DC: 470 V

MECHANICAL CHARACTERISTICS

- MATING FORCE : ≤ n x 0.94 N (n = NUMBER OF CTS) — ≤ 10 N (power contact)
- UNMATING FORCE : ≥ n x 0.15 N (n = NUMBER OF CTS) — ≤ 10 N (power contact)
- GAUGE RETENTION FORCE: ≥0.15 N
  THICKNESS GAUGE = 0.56 0/-0.02 - SURFACE ROUGHNESS: Ra = 0.25µm MAXI
- CONTACT RETENTION IN INSULATOR: ≥ 20 N according to IEC 512 test 6d
- VIBRATIONS: ≤ 1 µs according to IEC 512.4 test 6d
  ≤ 40 mΩ according to DIN41640 teil 15 test 6d

DIN class 3	(not applicable)
DIN class 2	10-500 HZ/5g
DIN class 1	10-2000 HZ/20g

- SHOCK: ≤ 1 µs according to IEC 512 test 6c
  ≤ 40 mΩ according to DIN 41640 teil 14 test 6c

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: TEMPERATURE RANGE -55°C TO +125°C
  DAMP HEAT STEADY STATE 56 DAYS Class 1
  21 DAYS Class 2
  (not applicable) Class 3
- ELECTRICAL LOAD AND TEMPERATURE: T= +70°C / I= 1A PER CTS - 1000 HRS

PERFORMANCE LEVELS

TIN LEAD P/N : 8609 XXX XX XX 7XX XXX EX
Pure Tin P/N : 8609 XXX XX XX 7XX XX LF

	MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST (1)	PERFORMANCE LEVELS
4	50 OPERATIONS	DIN Class 3
5	200 OP. + TEST(1) 4 DAYS + 200 OP.	DIN Class 2
6	250 OP. + TEST(1) 21 DAYS + 250 OP.	DIN Class 1

TEST: (1) INDUSTRIAL ATMOSPHERE SO_2

METALLIZED HOLE DIMENSIONS

- P.C.B HOLE DEFINITION: FINISH HOLE: Ø 0.90 - 1.10

CONTACT PLATING

- TIN LEAD VERSION:
  MALE AND FEMALE CONTACTS:
  - GOLD OVER NICKEL or GOLD+PALLADIUM-NICKEL OVER NICKEL ON MATING SURFACES
  - TIN LEAD OVER NICKEL ON SOLDER TERMINATION
- LEAD FREE VERSION:

NOTE RoHS INFORMATION

- The "LF" products meet European Union Directives and other country regulations as described in GS-22-008.
- The housing will whistand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6mm minimum thick circuit board.
- Termination plating spec: 1.27µm Nickel mini, 2.5 to 7.5µm Pure Tin (matte)
- Packaging spec: see GS-14-920

IMPORTANT:

- For the right angled versions , like the current leaded versions, it's recommended to use high temperature adhesive or metallic device, to protect the nearlest plastic part in contact with of the solder wave, to avoid any visual plastic deterioration.

rev	ecn no	dr	date
A	LS05-0039	LGO	2005/04/07
B	LS05-0070	LGO	2005/09/13
C	LS06-0097	LGO	2006/07/11
D	LS06-0142	LGO	2006/09/18
E	LS06-0201	HLE	2006/11/29
F	LS07-0211	HLE	2007/08/16
-	-	-	-

European Views

www.fciconnect.com

surface ISO 1302 — tolerance std ISO 406 ISO 1101 — projection — mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

Dr	GOISNARD	2005/04/07	ANGULAR	LINEAR	0.X ±0.1
Eng	TARON	2005/04/07			0.XX ±0.1
Chr	LEGARE	2005/04/07	0.XX° ±2°		0.XXX ±0.1
Appr	LEGARE	2005/04/07	Product family		DIN 8609

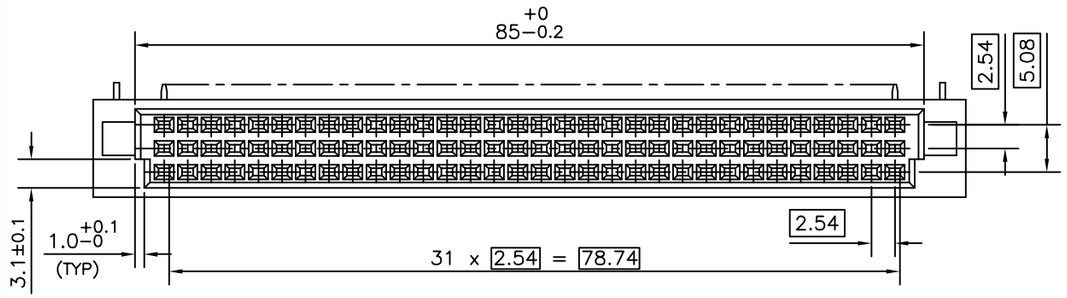
size A3 — Scale 1 — ECN LS07-0211 — Spec ref -

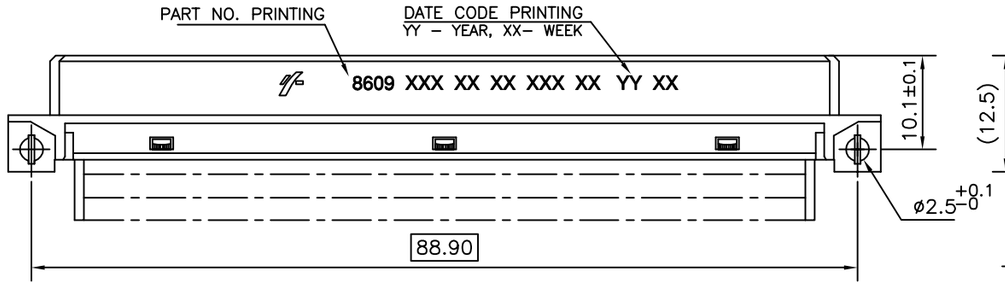
title: DIN 41612 STB CONNECTORS
GENERAL CHARACTERISTICS

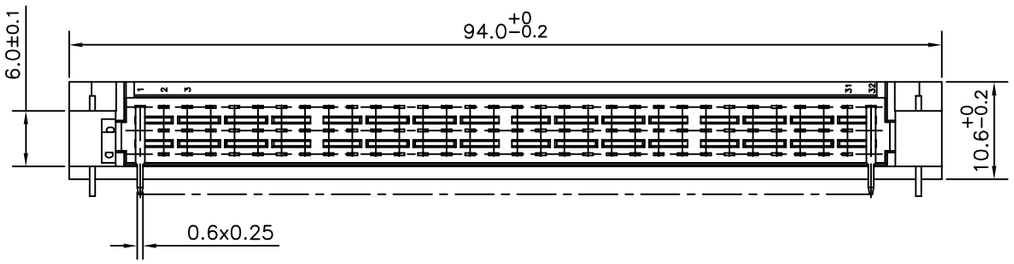
dwg no C-8609-0000A — Rev. F

catalog no - — CUSTOMER — sheet 1 of 1

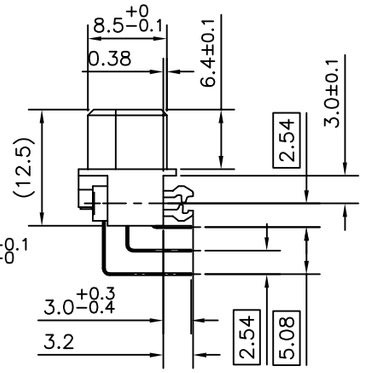
REV F - 2006-04-17



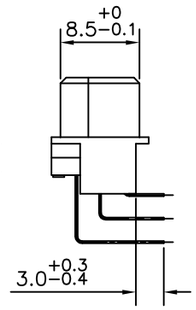




PCB DRILLING DETAILS



WITH HARPOONS



NO OPTION

TECHNICAL SPECIFICATION

HOUSING MATERIAL	: THERMOPLASTIC POLYESTER UL 94 V−0, GREY
	HOUSING CAN WITHSTAND EXPOSURE TO LEAD FREE WAVE SOLDERING TEMPERATURE OF 260−265°C WHEN USED WITH PROTECTIVE ADHESIVE OR PROTECTIVE METALLIC DEVICE FOR RIGHT ANGLE CONNECTORS AS IT IS USED IN CLASSICAL LEAD WAVE SOLDERING AT 235−250°C
CONTACT/ HARPOON MATERIAL	: COPPER ALLOY
CONTACT PLATING	
ACTIVE ZONE	: GOLD OVER NICKEL
TERMINATION ZONE	
TIN LEAD VERSION	: TIN LEAD OVER NICKEL
LEAD FREE VERSION	: TIN (PURE MATTE) OVER Ni
HARPOON PLATING	
TIN LEAD VERSION	: TIN LEAD OVER NICKEL
LEAD FREE VERSION	: TIN (PURE MATTE) OVER Ni
ELECTRICAL DATA	
CURRENT RATING AT 20°C	: 1.5 A
CURRENT (I MAX)	: 2 A
TEMPERATURE RANGE	: −55°C/+125°C
CONTACT RESISTANCE	: ≤ 20mΩ
INSULATION RESISTANCE	: ≥ 10^6 MΩ
TEST VOLTAGE (rms)	: 1000V
MECHANICAL DATA	
INSERTION FORCE PER CONTACT	: ≤ 0.94N
EXTRACTION FORCE PER CONTACT	: ≥ 0.15N
REFERENCE SPECIFICATIONS	: DIN 41612 / IEC 603−2

SERIES	8609	3	96	8	8	13	7	5	5	V1

ROWS FITTED WITH CONTACTS
- Rows a−b — 2 — 64
- Rows a−b−c — 3 — 96
- Rows a−c — 4 — 64

NUMBER OF CONTACTS

TYPE OF INSULATOR
- 3 ROW FEMALE INSULATOR — 8

METHOD OF MOUNTING
- REVERSE MOUNTING − STYLE R — 8

TERMINATION
- ANGLED SPILL — 13

OPTIONS
- WTH HARPOONS — H
- NO OPTION — 7

PERFORMANCE CLASS
- 4 − DIN 41612 CLASS 3 — 4
- 5 − DIN 41612 CLASS 2 — 5
- 6 − DIN 41612 CLASS 1 — 6
- 8 − AS PER MIL C 55302/JSS 50808 — 8

PITCH PER ROW
- 2.54 — 5

- V1 — TIN LEAD VERSION
- V1LF — LEAD FREE VERSION

NOTES:-

1. THE "LF" PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
2. 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 THICK CIRCUIT BOARD
3. LEAD FREE OR RoHS DIRECTIVE LABELING TO BE PROVIDED AS PER GS-14-920 FOR LEAD FREE VERSION.

ltr	ecn no	dr	date
A	I04−0100	MINI	09/11/2004
B	I05−0042	MINI	19/05/2005
C	I06−0063	MINI	01/06/2006

dr	MINI K VANDANATH	29/09/2004
engr	RAKHEE GEORGE	29/09/2004
chr	RAKHEE GEORGE	01/06/2006
appd	RAKHEE GEORGE	01/06/2006

mat'l. code: −
surface: ISO 1302
tolerance: ISO 406 ISO 1101
tolerances unless otherwise specified
angles: 0°±1° | linear: .0±.1
projection
mm
scale: −
product family: 8609
title: DIN REVERSE RECEPTACLE
ANGLED SPILL DIN 41612 STYLE-R
dwg no: C-8609-2029
sheet 1 of 1
size: A3
type: Product Customer Drawing
sheet index | revision: C | sheet: 1

form: A3