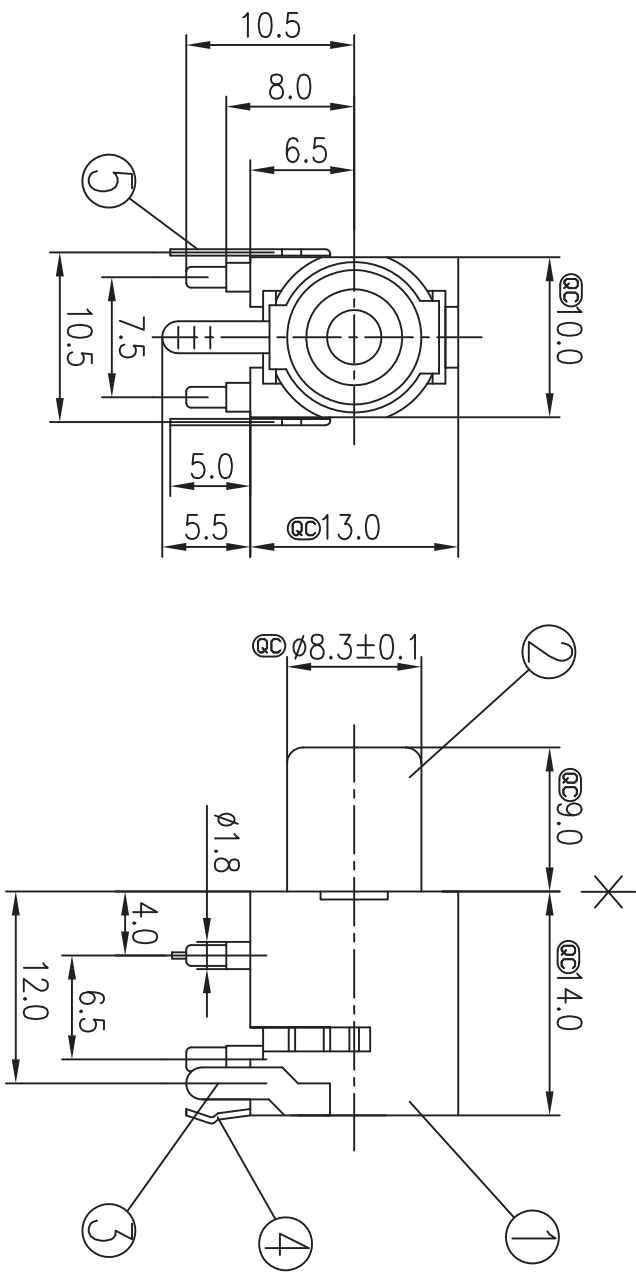


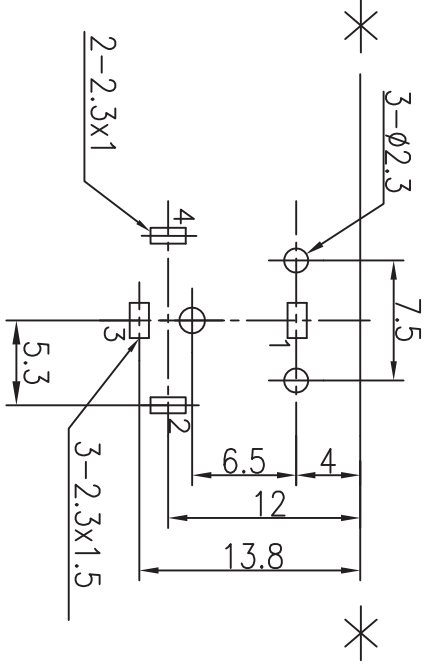
ECN NO.	REV	MODIFICATION	DATE	DRAW	APPROVE
	A1	NEW ISSUES	2009.07.02	JUL Y	ALAN

Model No.	COLOR
HLR-3207VXA-001HG	BLACK
HLR-3207VXA-002HG	RED
HLR-3207VXA-003HG	WHITE
HLR-3207VXA-004HG	YELLOW
HLR-3207VXA-005HG	BLUE



Model No.	HLR-3207VXA	HLR-3207VXB	HLR-3207VXC	HLR-3207VXD
Schematic				

NO.	DESCRIPTION	QTY	MATERIAL	REMARK
1	HOUSING	1	PBT	
2	OUTER CONTACT	1	C2680	t=0.4 MB:Cu AU PLATED
3	SHUNT SPRING	1	C2680	t=0.4 MB:Cu Ag PLATED
4	TIP SPRING	1	C5191	t=0.4 MB:Cu Ag PLATED
5	TERMINAL	1	C2680	t=0.4 MB:Cu Cu/Sn PLATED



T:1.6 Dimensions of PC board holes  
Tolerance :  $\pm 0.1$  (Printed-bottom view)

DIMENSION IN mm [Inch]		DWG NO.	FILE NO.	TITLE	CUSTOMER COPY
TOLERANCE UNLESS OTHERWISE SPECIFIED		HLR-3207VXA	HLR-3207VXA-001	PIN JACK	
X	$\pm 0.5$	X	$\pm 3^\circ$		
XX	$\pm 0.3$	XX	$\pm 2^\circ$		
XXX	$\pm 0.25$				
APPROVE		CHECK	DRAW	DATE	SCALE
JACK		ALAN	JUL Y		1:1
					REV
					1
					A1

# ***SPECIFICATION***

<b>TITLE</b> PIN JACK	<b>SPC. NO.</b>	<b>PAGE</b> 1 <b>OF</b> 6
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## SPECIFICATION

### 1. Standard atmospheric condition

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows

Ambient temperature 5 to 35

Relative humidity 45% to 85%

Air pressure 85kPa to 106kPa

If there is any doubt about the results, measurements shall be made within the following limits

Ambient temperature 20 ± 1

Relative humidity 60% to 70%

Air pressure 86kPa to 106kPa

Operating temperature range 25 to 60

Humidity range 85 RH MAX.

### 2. Construction

#### 2.1 Mating limit

Mating limit or range of between the plug and the spring of pin jack shall be not regulated.

#### 2.2 Connection timing

The pin jack shall be permitted with connection timing whether shorting or not between the mutually separated terminals or springs of the pin jack, during the plug inserting and extracting.

#### 2.3 Creepage distance and spacing

Creepage distance and spacing between mutually insulated parts shall be 0.3mm minimum, these distance and spacing shall be maintained with or without the gauge plug inserted.

ISSUE	DATE	WRTN	CHKD	APVD	DESCRIPTIONS
A/0	2005.12.20	SPAIN	S[AIN	QI	

# SPECIFICATION

<b>TITLE</b> PIN JACK	<b>SPC. NO.</b>	<b>PAGE 2 OF 6</b>
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### 3. Electrical characteristics

	Item	Condition	Specifications
1	Rated voltage Rated current		DC 34V 2A
2	Insulation resistance	A voltage of 500V D.C. shall be applied for 1 min. between mutually insulated metal parts after which measurement shall be made.	100 M MIN.
3	Contact resistance	Measurement shall be made at with small current 1000 Hz 100mA MAX.	30 m MAX.
4	Dielectric strength	500V A.C. r.m.s 50 Hz to 60 Hz for 1 min. Trip current 2mA	Without damage to parts, arcing or breakdown, etc.

### 4. Mechanical characteristics

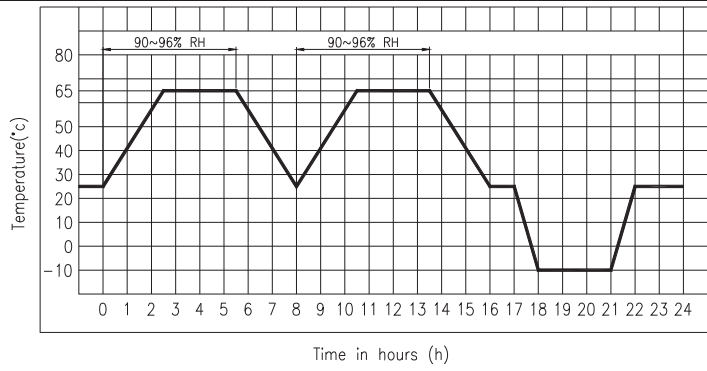
	Item	Condition	Specifications
1	Operating force	The insertion force and the withdrawal force shall be measured with the gauge plug as shown in Appendix attached.	Insertion force 29.4N 3kgf
			Withdrawal force 0.98N to 29.4N MAX. 0.1kgf to 3.0kgf
2	Terminal strength	Every terminal shall be capable of withstand a force of 4.9N 0.5kgf for 10 seconds.	Without cracks or excessive looseness to the terminal, but deformation of terminal is authorized. Electrical and mechanical characteristics shall be satisfied.
3	Loosen strength of contact	The terminal shall be capable of withstand a force of 29.4N 3kgf applied in any direction for 10 seconds.	
4	Strength of tapping part	The tapping part shall be capable of a torque of 49N-cm 5Kgf-cm for 5 seconds by M3X8 tapping tight screw and panel t=1 .	

# SPECIFICATION

<b>TITLE</b> PIN JACK	<b>SPC. NO.</b>	<b>PAGE</b> 3 <b>OF</b> 6
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## 5. Endurance characteristics

Item	Condition	Specifications
1	Operating endurance The life test shall consist of 150 cycles of insertion and withdrawal with gauge plug covered with a thin coat of grease in order to prevent from heating or wearing, at a rate of 20 to 30cycles per minutes under no load.	Electrical and mechanical Characteristics shall be satisfied.
2	Humidity test Temperature 40 ± 2 Relative humidity 90 ~ 95 for 96 hours. The testing jack shall be left alone for 30 minutes in a room ambient, before measurement shall be made.	Electrical and mechanical Characteristics shall be satisfied. Insulation resistance 50 M Ω MIN.
3	Dry heat The pin jack shall be subjected to temperature of 70 ± 2 for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 30 minutes.	Electrical and mechanical Characteristics shall be satisfied.
4	Cold The pin jack shall be subjected to temperature of 25 ± 3 for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 30 minutes.	Electrical and mechanical Characteristics shall be satisfied.
5	Resistance to soldering heat test The terminal for a printed circuit board Temperature of solder 260 ± 5 Dip time 5 ~ 1 seconds The terminal for a lead wire Temperature of solder 350 ± 10 Dip time 3 ~ 1 seconds	Electrical and mechanical Characteristics shall be Satisfied, and not show remarkable failure.
6	Composite temperature/humidity cyclic test The pin jack shall be subjected to the conditions as shown in below, and then shall be returned and allowed to remain in room ambient condition for 30 minutes.	Electrical and mechanical Characteristics shall be Satisfied.



4 cycles

# ***SPECIFICATION***

<b>TITLE</b> PIN JACK	<b>SPC. NO.</b>	<b>PAGE</b> 4 <b>OF</b> 6
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	Item	Condition	Specifications
7	Soldering test	Temperature of solder 230 ± 5 Time of dip 3 ± 0.5 seconds Length of dip 2 ± 0.5mm from top of terminal	The soldered area shall be covered a minimum of 90% of the surface being immersed.

## 6. Amendment

When the amendment of this specification comes into necessity, it shall be made by the mutual consultation and agreement between manufacturer and customer.

# SPECIFICATION

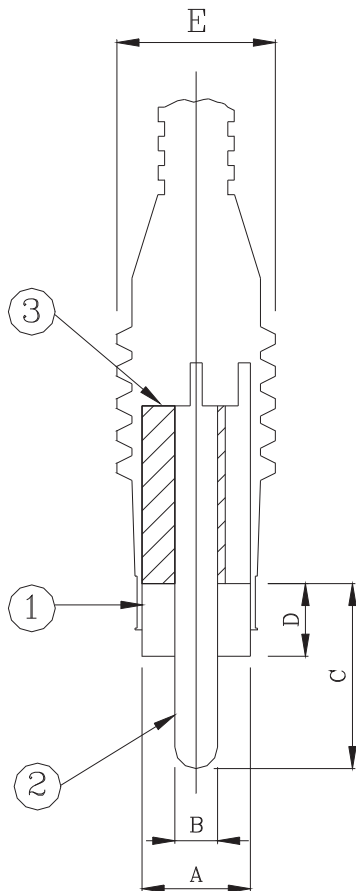
TITLE

PIN JACK

SPC. NO.

PAGE 5 OF 6

## Mating Photo Plug



① Plug cover

② Plug pin

③ Insulator

Symbol	Dimension
A	( $\phi 8.2$ )
B	$3.25^{+0}_{-0.15}$
C	$14.0 \pm 0.5$
D	$5.5 \pm 0.5$
E	12 Max

Unit: mm

( ): Reference value

Note: Eccentricity to central axis shall be 0.15 mm or less.