

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0442821004](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, Shielded, SMT, 8/8

Documents:

3D Model	Product Specification PS-43743-0001 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E107635

General

Product Family	Modular Jacks/Plugs
Series	44282
Component Type	PCB Jack
Magnetic	No
Overview	modular_plugs_jacks
Performance Category	3
Power over Ethernet (PoE)	N/A
Product Name	RJ45

Physical

Boot Color	N/A
Color - Resin	Black
Durability (mating cycles max)	500
Flammability	94V-0
Inverted / Top Latch	No
Keying to Mating Part	None
Lightpipes/LEDs	None
Material - Metal	Brass, Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Orientation	Right Angle (Side Entry)
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.034 In
PCB Thickness Recommended (mm)	0.86 mm
Packaging Type	Embossed Tape on Reel
Panel Mount	Without Flange
Pitch - Mating Interface (in)	0.040 In
Pitch - Mating Interface (mm)	1.02 mm
Pitch - Term. Interface (in)	0.050 In
Pitch - Term. Interface (mm)	1.27 mm
Plating min: Mating (µin)	50
Plating min: Mating (µm)	1.25
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Ports	1
Positions / Loaded Contacts	8/8
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +70°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No

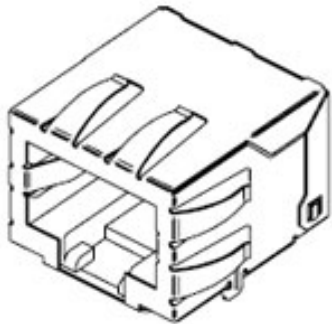


image - Reference only

Series

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

China RoHS



**Need more information on product
environmental compliance?**

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of
Compliance, [click here](#)

Please visit the [Contact Us](#) section for any
non-product compliance questions.

Search Parts in this Series

[44282Series](#)

Mates With

FCC 68 Plugs

Wire/Cable Type	N/A
Electrical	
Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Grounding to Panel	None
Shielded	Yes
Voltage - Maximum	150V AC (RMS)
Solder Process Data	
Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235
Material Info	
Reference - Drawing Numbers	
Packaging Specification	PK-70873-700*
Product Specification	PS-43743-0001
Sales Drawing	SD-44282-001

This document was generated on 06/08/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

NOTES:

1) MATERIAL:

HOUSING & INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS: PHOSPHOR BRONZE, .012/(0.30) THICK
SHIELD: BRASS

2) FINISH:

TERMINALS:

- A = SELECT GOLD IN CONTACT AREA: .000050/(0.00127) MIN.,
*SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.
B = SELECT GOLD IN CONTACT AREA: .000030/(0.00076) MIN.,
*SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.
C = SELECT GOLD IN CONTACT AREA: .000015/(0.00038) MIN.,
*SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.

SHIELD:

- *100 MICROINCHES NICKEL OVER 50 MICROINCHES COPPER UNDERPLATE
PCB GROUND TABS DIPPED IN TIN
*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS
DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC".
CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD
IN THE PC TAILS AND/OR SHIELD.

3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43743-0001.

4) PACKAGING SPECIFICATION:

CONNECTOR ASSEMBLIES TO BE PACKAGED USING TAPE & REEL SYSTEM
PER PACKAGING DRAWING PK-70873-7006.

5) COPLANARITY SPECIFICATION:

WHEN AN ASSEMBLY IS PLACED UPON A LEVEL SURFACE, THE MAXIMUM
GAP BETWEEN THE LEVEL SURFACE AND ALL TERMINAL TAILS AND
FRONT SOLDER TAB IS .006/(0.15).

6) THRU HOLES .094±.002/(2.39±0.05) ARE FOR SHIELDS WITH LOCATION TABS ONLY.

7) AVAILABLE WITH (4) OPTIONAL SIDE GROUND TABS (OMITTED FOR SIDE TO SIDE STACKABILITY).

8) AVAILABLE WITH (2) OPTIONAL LOCATION TABS FOR LOCATING COMPONENT TO PCB AND/OR GROUNDING TO PCB.

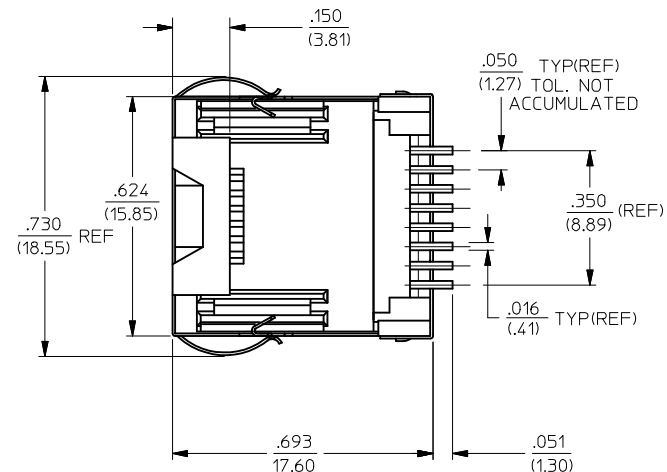
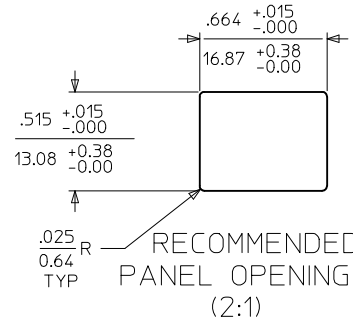
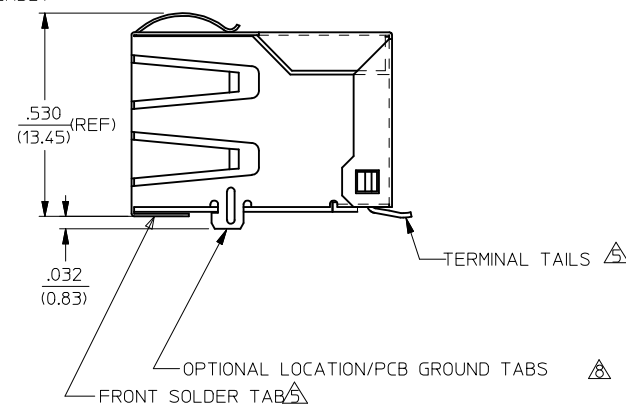
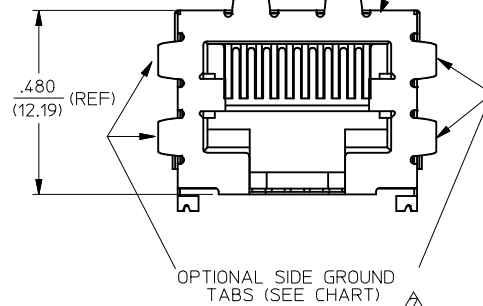
9) FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT
AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT.

10) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.

11) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC
SPECIFICATION PS-45499-002.

OPTIONAL TOP GROUND TABS
(SEE CHART)

SHIELDED SMT
MODJACK ASSEMBLY



44282-1004	A	NO	NO	YES	NONE
44282-0012	C	NO	YES	NO	NONE
44282-0011	B	NO	YES	NO	NONE
44282-0010	A	NO	YES	NO	NONE
44282-0009	C	YES	YES	NO	NONE
44282-0008	B	YES	YES	NO	NONE
44282-0007	A	YES	YES	NO	NONE
44282-0006	C	NO	YES	YES	NONE
44282-0005	B	NO	YES	YES	NONE
44282-0004	A	NO	YES	YES	NONE
44282-0003	C	YES	YES	YES	NONE
44282-0002	B	YES	YES	YES	NONE
44282-0001	A	YES	YES	YES	NONE

44282-0001, 44282-0002
& 44282-0003 SHOWN

REVISED NOTES EC NO: UCP2009-1244 DRWN:JKLOSTNER 2008/12/10 CHKD:JBELL 2008/12/10 APPR:FSMITH 2008/12/10	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	TITLE SINGLE PORT, SHIELDED SIZE 8, 8 CIRCUIT SMT MODJACK	MOLEX INCORPORATED	DOCUMENT NO. SD-44282-001	SHEET NO. 1 OF 2
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE C	MATERIAL NO. SEE CHART	APPROVED BY EDGLEY	DATE 99/06/03	DRAWN BY STAMBAUG	DATE 99/06/03	CHECKED BY WIRKUS	DATE 99/06/03	APPROVED BY EDGLEY	DATE 99/06/03	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

13

12

11

10

9

8

7

6

5

4

3

2

1

J

I

H

G

F

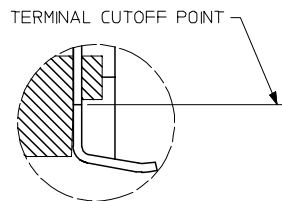
E

D

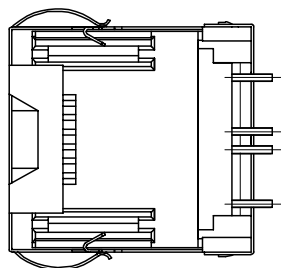
C

B

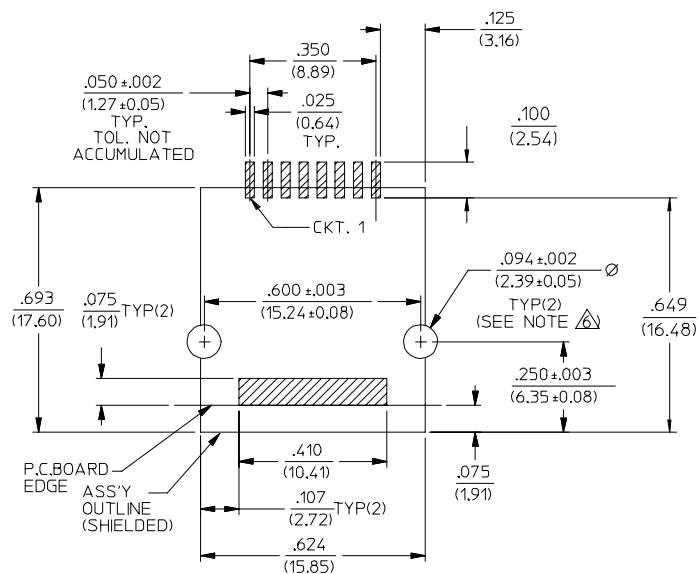
A



VIEW SHOWING TYPICAL TERMINAL
CUTOFF OF TAIL (SEE NOTE 10) FOR VOIDED CIRCUITS.



TYPICAL VIEW SHOWING VOIDED CIRCUIT
(CIRCUITS 2,3,6 & 7 SHOWN VOIDED)



PC BOARD LAYOUT FOR
8 POSITION HOUSING
(COMPONENT SIDE OF BOARD)

NOTES:
1. RECOMMENDED MINIMUM PCB THICKNESS: .034/0.86

SEE SHEET ONE EC NO: UCP2008-0143 DRAWN: J.BELL 2007/07/24 CHKD: L.S.H.M.D.T 2007/07/30 APPR: F.S.M.T.H. 2007/08/01 D2	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	SURFACE MOUNT MODULAR JACK W/ SHIELD				
			4 PLACES ± ---	± ---	STAMBAUG	99/06/03					
			3 PLACES ± ---	± .010	CHECKED BY	DATE	MOLEX INCORPORATED SD-44282-001				
			2 PLACES ± 0.25		± ---	WIRKUS					99/06/03
			1 PLACE ± ---		± ---	APPROVED BY	DATE	MOLEX MOLEX INCORPORATED			
			ANGULAR ±1/2°		EDGLEY	99/06/03					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
					SEE CHART		SD-44282-001		2 OF 2		
					SIZE C THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

12

11

10

9

8

7

6

5

4

3

2

1



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.