

Commercial Micro-D

Subminiature I/O Products



FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D Plug

83611/83612/83614

Right Angle

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
 Designed In: Inches
 Packaging: Tube
 Mates With: 83421, 83422, 83424
 PCB Thickness: 1.60mm (.062")
 Lead Free Process Capability:
 Wave/Surface Mount Compatible
 RoHS Compliant

Electrical

Current: 1.0A
 Contact Resistance: 8 milliohms max.

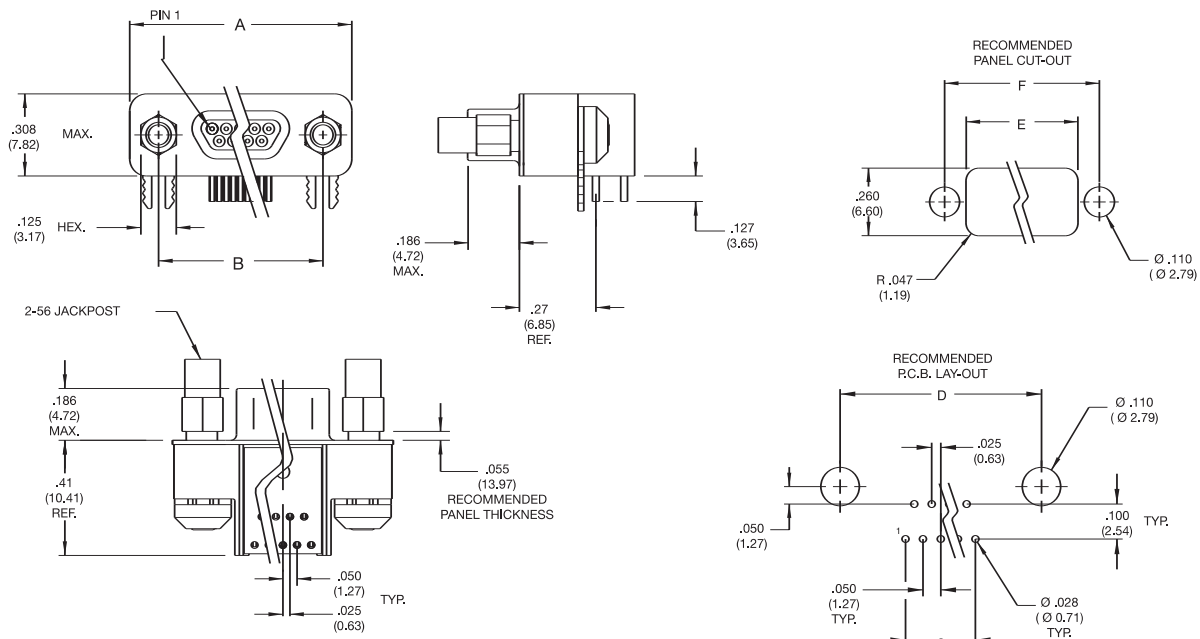
Mechanical

Contact Insertion Force: 3 oz. avg.
 Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
 Insulator – LCP, UL 94V-0
 Contact: Pin – Gold-plated Beryllium Copper
 Jackpost: Stainless steel
 Operating Temperature: -55 to +125°C

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension					
	with Jackposts	without Jackposts*	A (Max.)	B (Nom.)	C (Ref.)	D (Nom.)	E (Ref.)	F (Nom.)
9	83611-9006	83611-9016	19.93 (.785)	14.35 (.565)	5.08 (.200)	14.35 (.565)	10.41 (.410)	14.35 (.565)
15	83612-9020	83612-9022	23.75 (.935)	18.16 (.715)	8.88 (.350)	18.16 (.715)	14.22 (.560)	18.16 (.715)
25	83614-9012	83614-9014	30.10 (1.185)	24.51 (.965)	15.23 (.600)	24.51 (.965)	20.57 (.810)	24.51 (.965)

*Jackposts can be ordered separately. Use part number 83041-0005

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D Plug

83611/83612/83614

Vertical

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
 Designed In: Inches
 Packaging: Tube
 Mates With: 83421, 83422, 83424
 PCB Thickness: 1.60mm (.062")
 Lead Free Process Capability:
 Wave/Surface Mount Compatible
 RoHS Compliant

Electrical

Current: 1.0A
 Contact Resistance: 8 milliohms max.

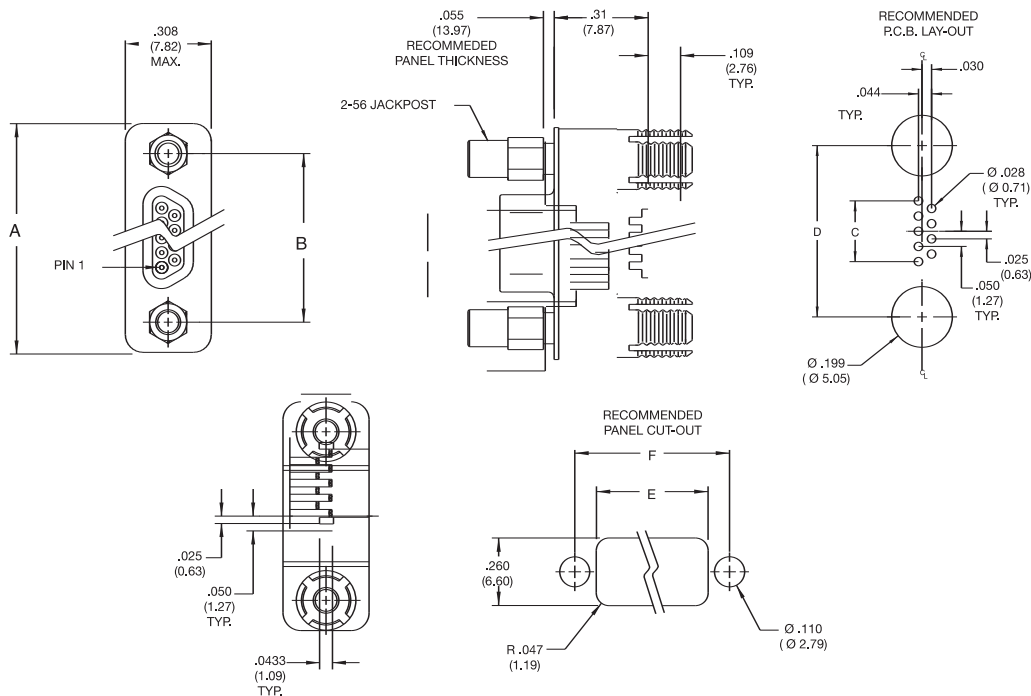
Mechanical

Contact Insertion Force: 3 oz. avg.
 Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
 Insulator – LCP, UL 94V-0
 Contact: Pin – Gold-plated Beryllium Copper
 Jackpost: Stainless steel
 Operating Temperature: -55 to +125°C

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension					
	with Jackposts	without Jackposts*	A (Max.)	B (Nom.)	C (Ref.)	D (Nom.)	E (Ref.)	F (Nom.)
9	83611-9023	83611-9206	19.93 (.785)	14.35 (.565)	5.08 (.200)	14.35 (.565)	10.41 (.410)	14.35 (.565)
15	83612-9024	83612-9205	23.75 (.935)	18.16 (.715)	8.88 (.350)	18.16 (.715)	14.22 (.560)	18.16 (.715)
25	83614-9016	83614-9202	30.10 (1.185)	24.51 (.965)	15.23 (.600)	24.51 (.965)	20.57 (.810)	24.51 (.965)

*Jackposts can be ordered separately. Use part number 83041-0005

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D Plug

83619

Right Angle, Dual Stack

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
 Designed In: Inches
 Packaging: Tube
 Mates With: 83421, 83422, 83424
 PCB Thickness: 1.60mm (.062")
 Lead Free Process Capability:
 Wave/SurfaceMount Compatible
 RoHS Compliant

Electrical

Current: 1.0A
 Contact Resistance: 8 milliohms max.

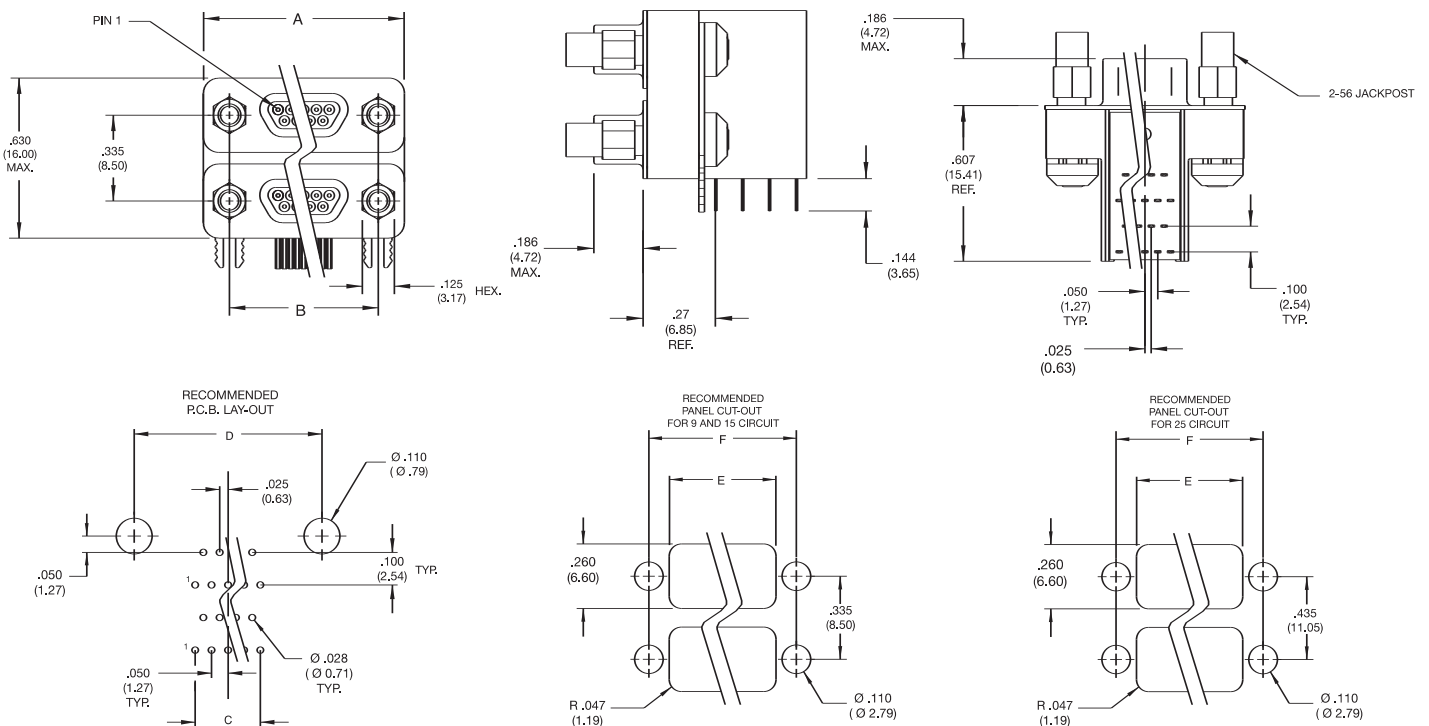
Mechanical

Contact Insertion Force: 3 oz. avg.
 Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
 Insulator – LCP, UL 94V-0
 Contact: Pin – Gold-plated Beryllium Copper
 Jackpost: Stainless steel
 Operating Temperature: -55 to +125°C

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension					
	with Jackposts	without Jackposts*	A (Max.)	B (Nom.)	C (Ref.)	D (Nom.)	E (Ref.)	F (Nom.)
9	83619-9003	83619-9200	19.93 (.785)	14.35 (.565)	5.08 (.200)	14.35 (.565)	10.41 (.410)	14.35 (.565)
15	83619-9010	83619-9201	23.75 (.935)	18.16 (.715)	8.88 (.350)	18.16 (.715)	14.22 (.560)	18.16 (.715)
25	83619-9011	83619-9202	30.10 (1.185)	24.51 (.965)	15.23 (.600)	24.51 (.965)	20.57 (.810)	24.51 (.965)

*Jackposts can be ordered separately. Use part number 83041-0005

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D Cable Receptacle Kit

83421/83422/83424

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Crimp and poke configuration designed for hand or semiautomatic crimping

Reference Information

UL File No. E34763
Designed In: Inches
Packaging: Box/Reel
Mates With: 83611, 83612, 83614, 8361
RoHS Compliant

Electrical

Current: 1.0A
Contact Resistance: 8 milliohms max.

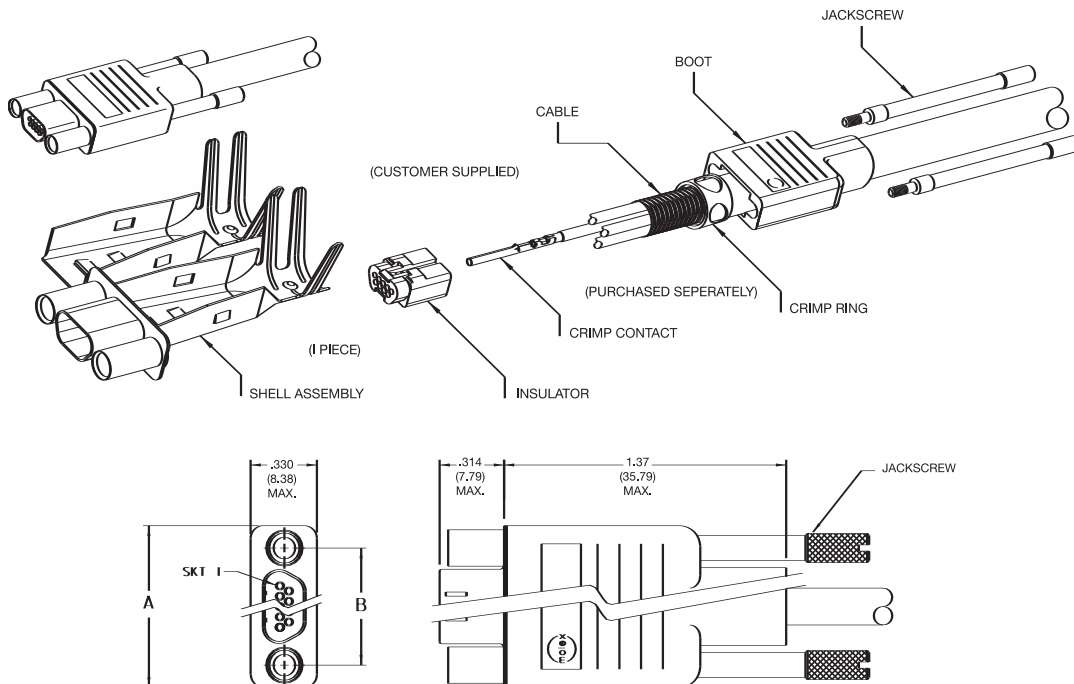
Mechanical

Contact Insertion Force: 3 oz. avg.
Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
Insulator – LCP, UL 94V-0
Contact: Socket – Gold-plated Copper Alloy
Boot: Santoprene
Jackscrew: Stainless Steel

CATALOG DRAWING (FOR REFERENCE ONLY)



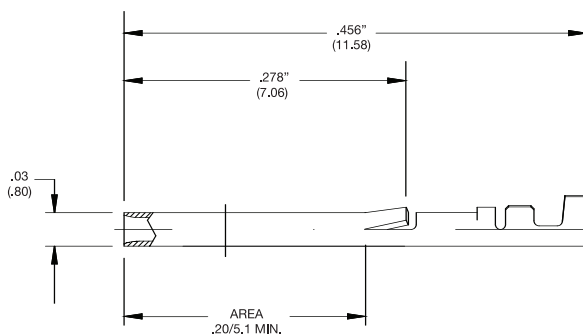
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A (Min.)	B (Nom.)
9	83421-9014	19.93 (.785)	14.35 (.565)
15	83422-9014	23.75 (.935)	18.16 (.715)
25	83424-9014	30.10 (1.185)	24.51 (.965)

Socket Terminals

83000

Description	Order No.
2,500 Piece Reel	83000-9502
50,000 Piece Reel	83000-9503
Loose	83000-0083



FEATURES AND SPECIFICATIONS

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
RoHS Compliant

Electrical

Current: 1.0A
Contact Resistance: 8 milliohms max.

Mechanical

Contact Insertion Force: 3 oz. avg.
Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
Insulator – LCP, UL 94V-0
Contact: Pin – Gold-plated Beryllium Copper
Jackpost: Stainless steel
Operating Temperature: -55 to +125°C
Cable: 28 AWG-PVC Jacket - Shielded - 85°, 300V
UL 2464

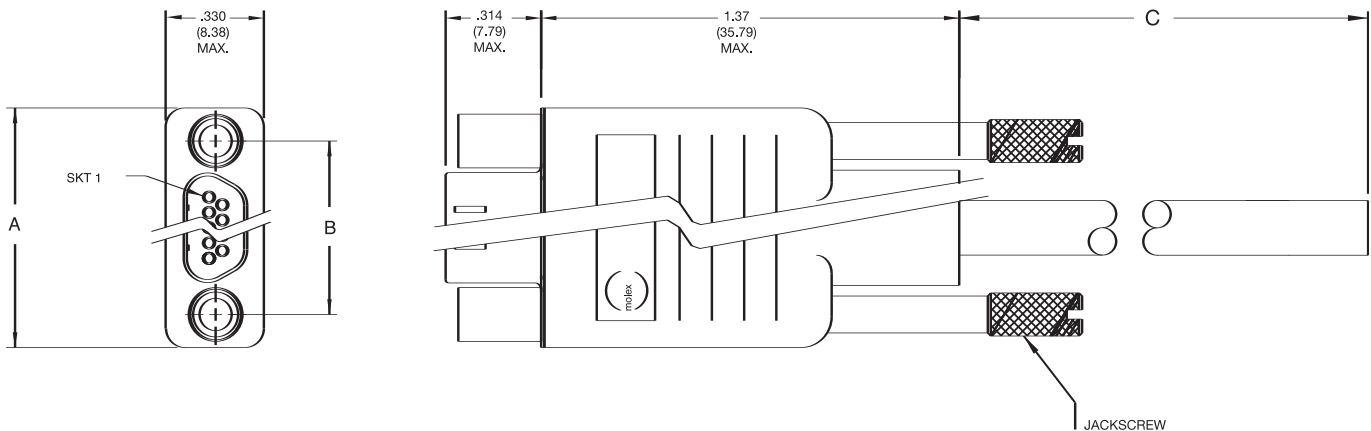


1.27mm (.050") Pitch Commercial Micro-D Cable Receptacle

83421/83422/83424

Assembled

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimensions	
	C=18" +/-1"	C=36" +/-1"	C=72" +/-1"	A (Max.)	B (Nom.)	
9	83421-9042	83421-9043	83421-9044	19.93 (.785)	14.35 (.565)	
15	83422-9007	83422-9013	83422-9018	23.75 (.935)	18.16 (.715)	
25	83424-9019	83424-9020	83424-9021	30.10 (1.185)	24.51 (.965)	

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D to Commercial Micro-D Cable Assembly

83421/83422/83424

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
RoHS Compliant

Electrical

Current: 1.0A
Contact Resistance: 8 milliohms max.

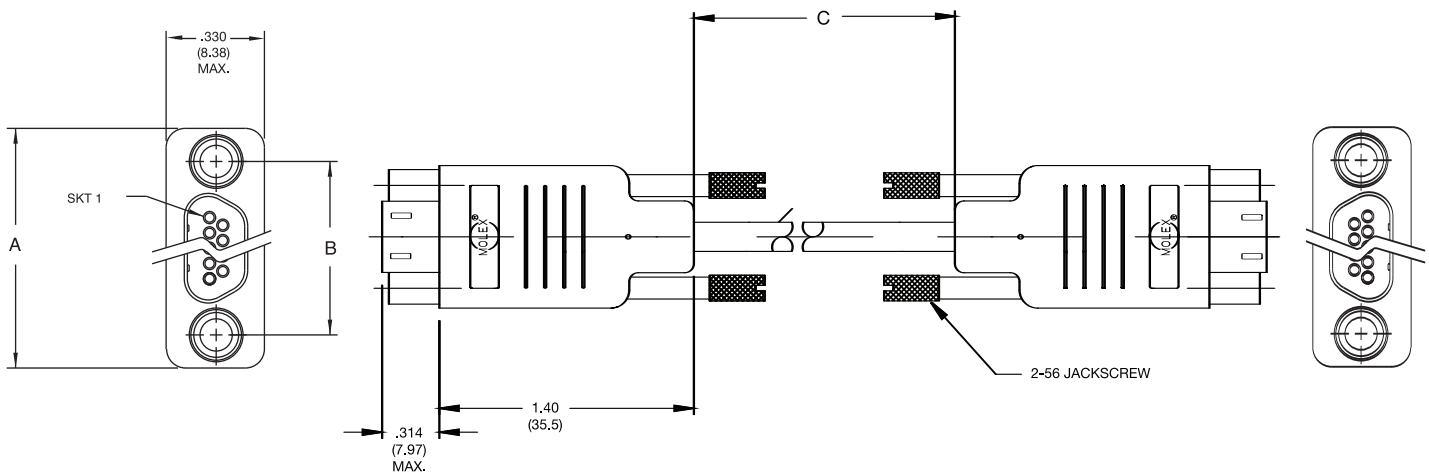
Mechanical

Contact Insertion Force: 3 oz. avg.
Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
Insulator – LCP, UL 94V-0
Contact: Pin – Gold-plated Beryllium Copper
Jackpost: Stainless steel
Operating Temperature: -55 to +125°C
Cable: 28 AWG-PVC Jacket - Shielded - 85°, 300V
UL 2464

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension				
	Order No.			A (Max.)	B (Nom.)
	C=18"±.39"	C=36"±.75"/-.59"	C=72"±1.50/-0"		
9	83421-9049	83421-9050	83421-9051	19.93 (.785)	14.35 (.565)
15	83422-9053	83422-9054	83422-9055	23.75 (.935)	18.16 (.715)
25	83424-9057	83424-9058	83424-9059	30.10 (1.185)	24.51 (.965)

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D to D-Sub Socket Cable Assembly

83421/83422/83424

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763
RoHS Compliant

Electrical

Current: 1.0A
Contact Resistance: 8 milliohms max.

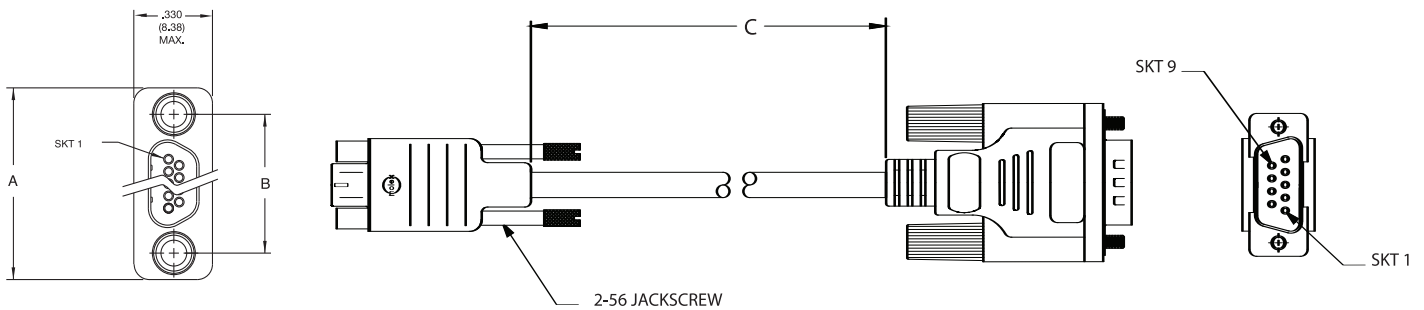
Mechanical

Contact Insertion Force: 3 oz. avg.
Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
Insulator – LCP, UL 94V-0
Contact: Pin – Gold-plated Beryllium Copper
Jackpost: Stainless steel
Operating Temperature: -55 to +125°C
Cable: 28 AWG-PVC Jacket - Shielded - 85°, 300V
UL 2464

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension				
	Order No.			A (Max.)	B (Nom.)
	C=18" +/- .5"	C=36" +/- .5"	C=72" +/- .5"		
9	83421-9039	83421-9040	83421-9041	19.93 (.785)	14.35 (.565)
15	83422-9056	83422-9057	83422-9058	23.75 (.935)	18.16 (.715)
25	83424-9063	83424-9064	83424-9065	30.10 (1.185)	24.51 (.965)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Rugged commercial design with a metal interface and grounding tabs for improved mechanical and electrical shield conditions

Reference Information

UL File No. E34763

RoHS Compliant

Electrical

Current: 1.0A

Contact Resistance: 8 milliohms max.

Mechanical

Contact Insertion Force: 3 oz. avg.

Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel

Insulator – LCP, UL 94V-0

Contact: Pin – Gold-plated Beryllium Copper

Jackpost: Stainless steel

Operating Temperature: -55 to +125°C

Cable: 28 AWG-PVC Jacket - Shielded - 85°, 300V

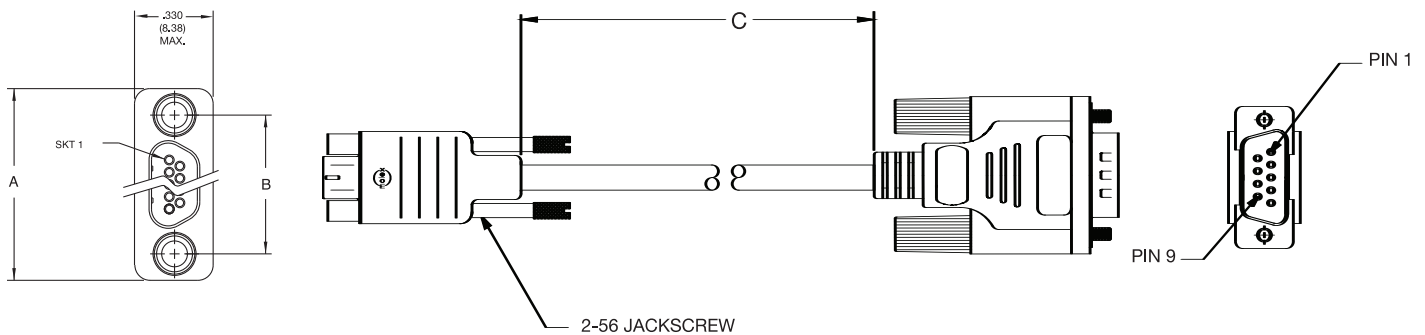
UL 2464



1.27mm (.050") Pitch Commercial Micro-D to D-Sub Pin Cable Assembly

83421/83422/83424

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension				
	Order No.			A (Max.)	B (Nom.)
	C=18" +/- .5"	C=36" +/- .5"	C=72" +/- .5"		
9	83421-9036	83421-9037	83421-9038	19.93 (.785)	14.35 (.565)
15	83422-9059	83422-9060	83422-9061	23.75 (.935)	18.16 (.715)
25	83424-9060	83424-9061	83424-9062	30.10 (1.185)	24.51 (.965)

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Commercial Micro-D Panel Mount Header

83411/83412/83000

Features and Benefits

- Economical solution for commercial applications requiring the density of a microminiature connector
- Crimp and poke configuration designed for hand or semiautomatic crimping

Reference Information

UL File No. E34763
Mates With 83421/83422/83424
RoHS Compliant

Electrical

Current: 1.0A
Contact Resistance: 8 milliohms max.

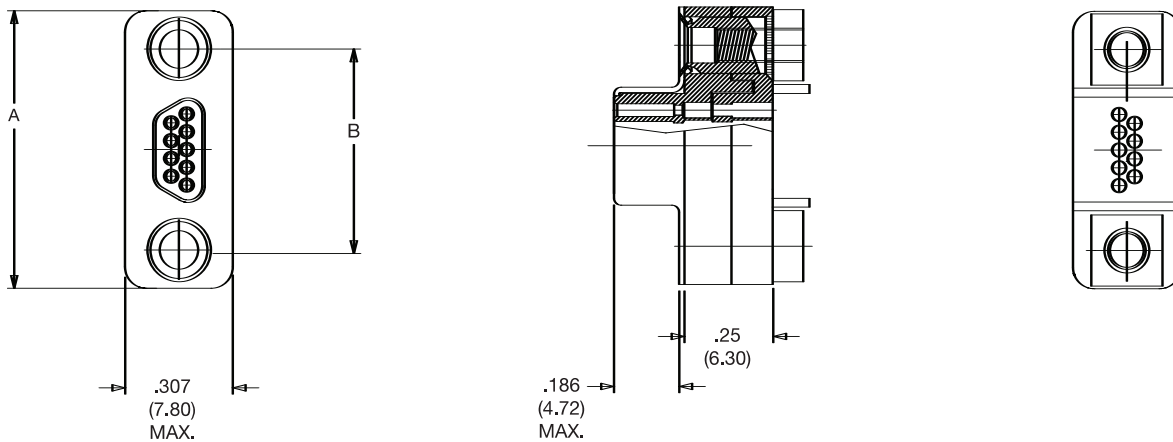
Mechanical

Contact Insertion Force: 3 oz. avg.
Unmating Force: 0.5 oz. min.

Physical

Housing: Shell – Nickel-plated 1008LC Steel
Insulator – LCP, UL 94V-0
Contact: Socket – Gold-plated Copper Alloy

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Cable Receptacle

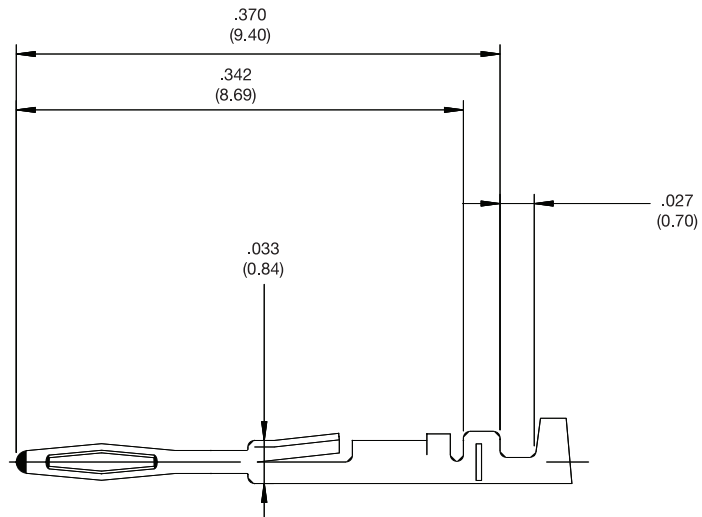
Circuits	Order No.	Dimension	
		A (Min.)	B (Nom.)
9	83411-9110	19.88mm (.783")	14.25mm (.565")
15	Call Factory	23.69mm (.933")	18.12mm (.715")
25	83414-9021	30.05mm (1.183")	24.51mm (.965")

*Jackposts need to be ordered separately. Use part number 83041-0005

Pin Terminals

83000

Description	Order No.	
	15µ Gold	50µ Gold
2,500 Piece Reel	83000-9561	83000-9558
50,000 Piece Reel	83000-9562	83000-9559
Loose	83000-9560	83000-0110



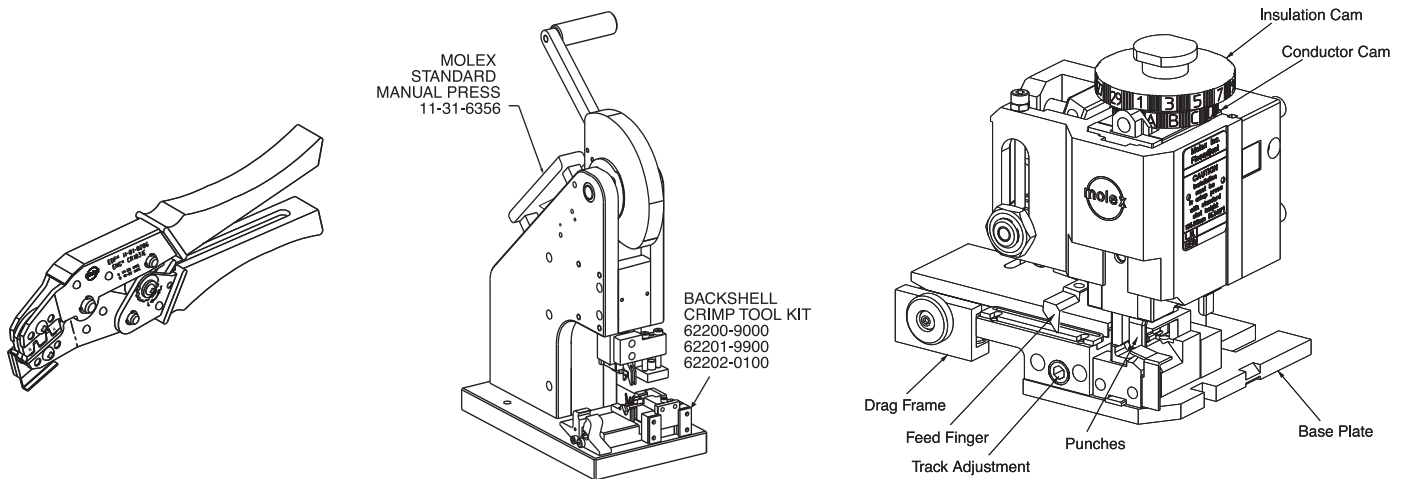
FEATURES AND SPECIFICATIONS

- Fine adjustment allows users to achieve target with little effort by adjusting on increments of 0.15mm (.0006") for conductor crimp height and .063mm (.0025") for insulation height
- Crimp Hand tool is used for prototype and field repair work which improves comfort and grip
- Crimp press provides an effective method of applying side feed terminals to a pre-stripped wire and cable with quick tooling changeovers
- Crimp tooling is used for both receptacle and pin terminals



Application Tooling Commercial Micro-D Crimp Tooling

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Application Tooling	Order No	Product No.
63811-4800	Hand Tool	83000
63862-2000	FineAdjust Applicator	83000

Strain Relief Tooling	Circuits	Order No.	Product No.
Hand Tool	9	62100-0900	83421
Hand Tool	15	62100-4100	83442
Hand Tool	25	62100-4200	83424
Press and Tool Kit	9	62100-8900	83421
Press and Tool Kit	15	62101-9800	83442
Press and Tool Kit	25	62202-0000	83424
Tool Kit Only	9	62200-9000	83421
Tool Kit Only	15	62201-9900	83442
Tool Kit Only	25	62202-0100	83424
Press Only	All	11-31-6356	All



Americas Headquarters

4650 62nd Avenue North
Pinellas Park, Florida 33781
Tel: 800-800-0449
Fax: 727-528-1010

Asia Pacific North Headquarters

Kanagawa, Japan
Tel: 81-462-65-2324
Fax: 81-462-65-2361

Asia Pacific South Headquarters

Jurong, Singapore
Tel: 65-268-6868
Fax: 65-265-6044

European Headquarters

Munich, Germany
Tel: 49-89-413092-0
Fax: 49-89-401527

Corporate Headquarters

2222 Wellington Court
Lisle, Illinois 60532 U.S.A.
Tel: 630-969-4550
Fax: 630-969-1352

Visit our Web site at <http://www.molex.com>