

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0716612960](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Right Angle, Blind-Mate, 60 Circuits, 2.79mm (.110") PC Tail Length

Documents:

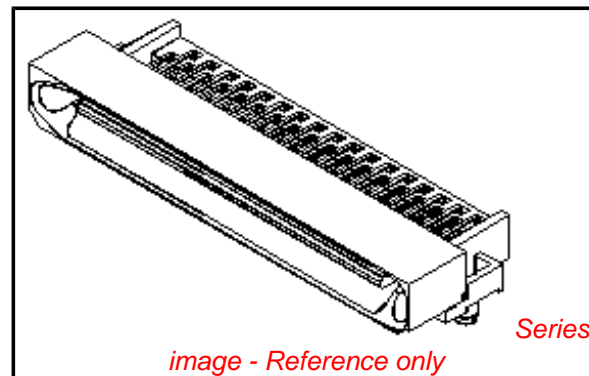
[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

General

Product Family	PCB Headers
Series	71661
Application	Board-to-Board, Wire-to-Board
Overview	ebbi_50d
Product Name	EBBI™

Physical

Breakaway	No
Circuits (Loaded)	60
Circuits (maximum)	60
Color - Resin	Black
Durability (mating cycles max)	2,000
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	None
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.110 In
PC Tail Length (mm)	2.79 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Pitch - Term. Interface (in)	0.050 In
Pitch - Term. Interface (mm)	1.27 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	50
Plating min: Termination (µm)	1.30
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole



EU RoHS

ELV and RoHS Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

Not Reviewed

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.

China RoHS



Search Parts in this Series

[71661Series](#)

Mates With

EBBI™ 50D Receptacle [71660](#) , [87552](#)

Electrical

Current - Maximum per Contact	1A
Voltage - Maximum	30V

Solder Process Data

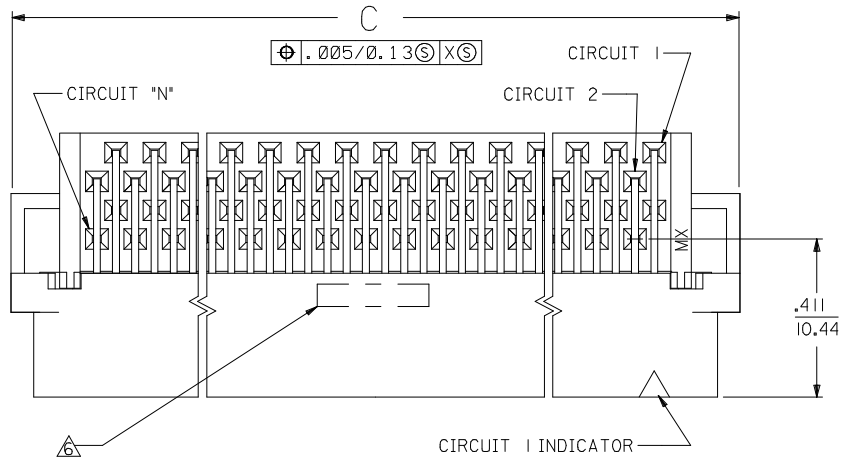
Duration at Max. Process Temperature (seconds)	40
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	245

Material Info**Reference - Drawing Numbers**

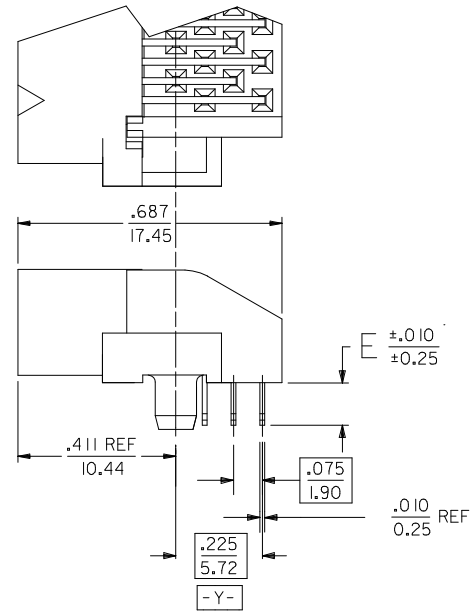
Packaging Specification	PK-70873-084*
Sales Drawing	SD-71661-007

This document was generated on 05/31/2010

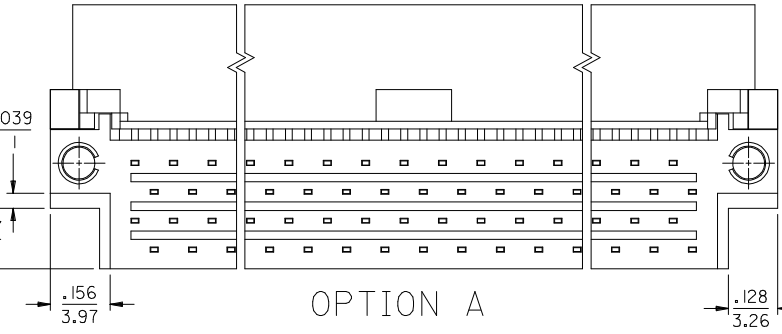
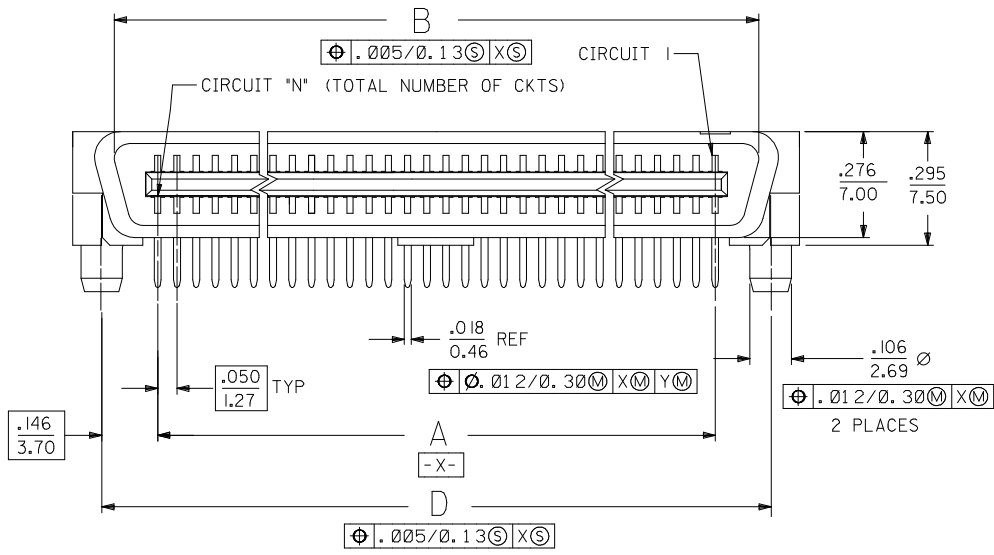
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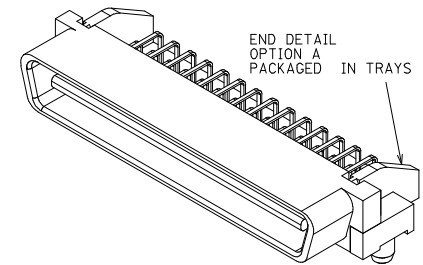
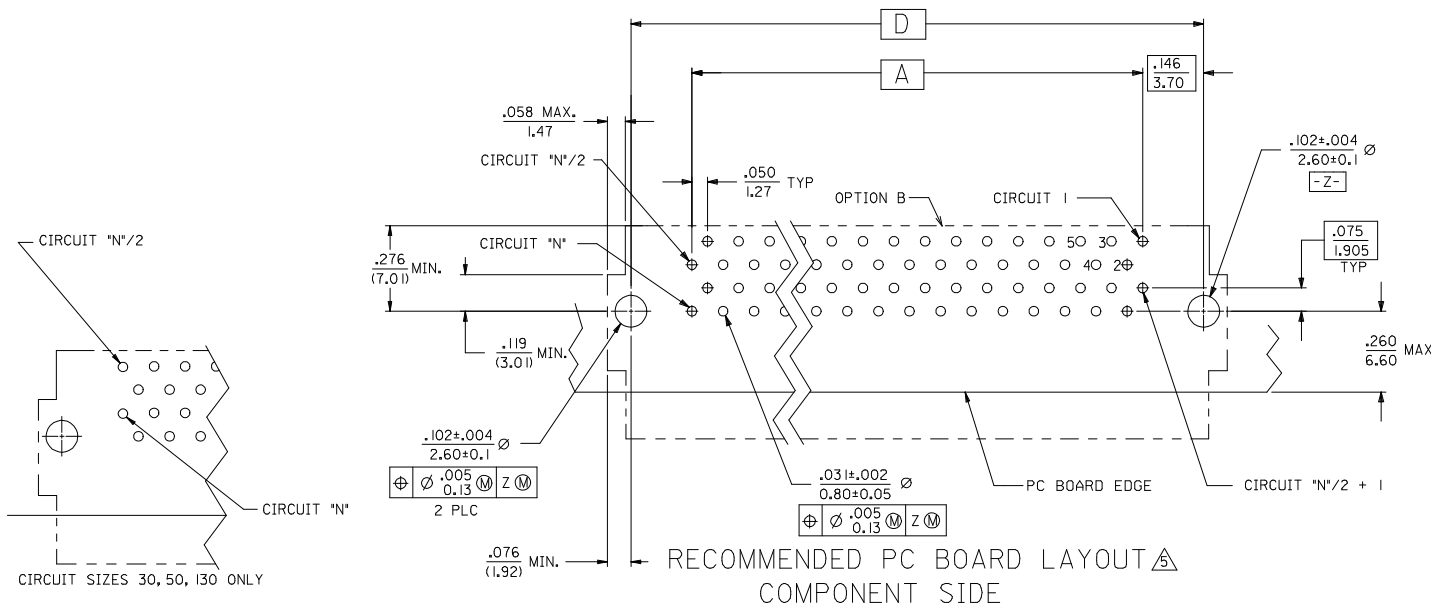
- NOTES:**
- MATERIALS:**
HOUSING: LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL 94V-0,
COLOR: BLACK
TERMINALS: BRASS.
 - FINISH:**
TERMINAL: SELECTIVE GOLD (Au) IN THE CONTACT AREA;
THICKNESS= .76 MICROMETER (30 MICROINCH) MINIMUM;
SELECTIVE TIN (Sn) ALLOY IN THE PC TAIL AREA;
THICKNESS= 1.27 MICROMETER (50 MICROINCH) MINIMUM;
NICKEL (Ni) UNDERPLATE OVERALL.
 - ASSEMBLY MATES WITH MOLEX P/N SDA-71660-****
 - CONFORMS TO PRODUCT SPEC: PS-71660.
- RECOMMENDED P.C. BOARD THICKNESS IS .062 (1.6).
- FOUR DIGIT DATE CODE (WK. YR.) EXAMPLE 26 96 LOCATED IN AREA SHOWN.
- TOOLING STATUS: *X* INDICATES NO TOOLING AVAILABLE. CONTACT FACTORY FOR FURTHER INFORMATION.



END DETAIL
OPTION A
(BOTH ENDS)



CHANGE MATERIAL EC NO: UCP2009-1254 DRWINHISIBARRA 2008/12/19 CHKD:BBARKER 2009/01/06 APPR:SMILLER 2009/01/06	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION							
			<table border="1"> <tr> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±---</td> <td>±---</td> </tr> <tr> <td>3 PLACES ±---</td> <td>±.010</td> </tr> <tr> <td>2 PLACES ±0.25</td> <td>±---</td> </tr> <tr> <td>1 PLACE ±---</td> <td>±---</td> </tr> </table>	mm	INCH	4 PLACES ±---	±---	3 PLACES ±---	±.010	2 PLACES ±0.25	±---	1 PLACE ±---	±---	DRAWN BY RKADAMS	DATE 2004/08/18
mm	INCH														
4 PLACES ±---	±---														
3 PLACES ±---	±.010														
2 PLACES ±0.25	±---														
1 PLACE ±---	±---														
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			APPROVED BY SMILLER	DATE 2004/08/18	MOLEX INCORPORATED										
SEE TABLE			MATERIAL NO.	DOCUMENT NO.	SHEET NO. 1 OF 2										
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															

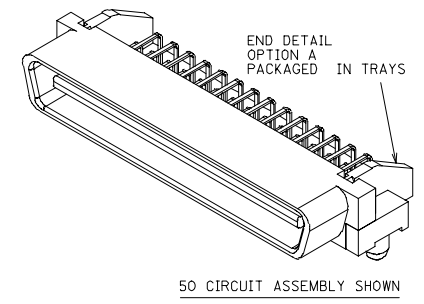
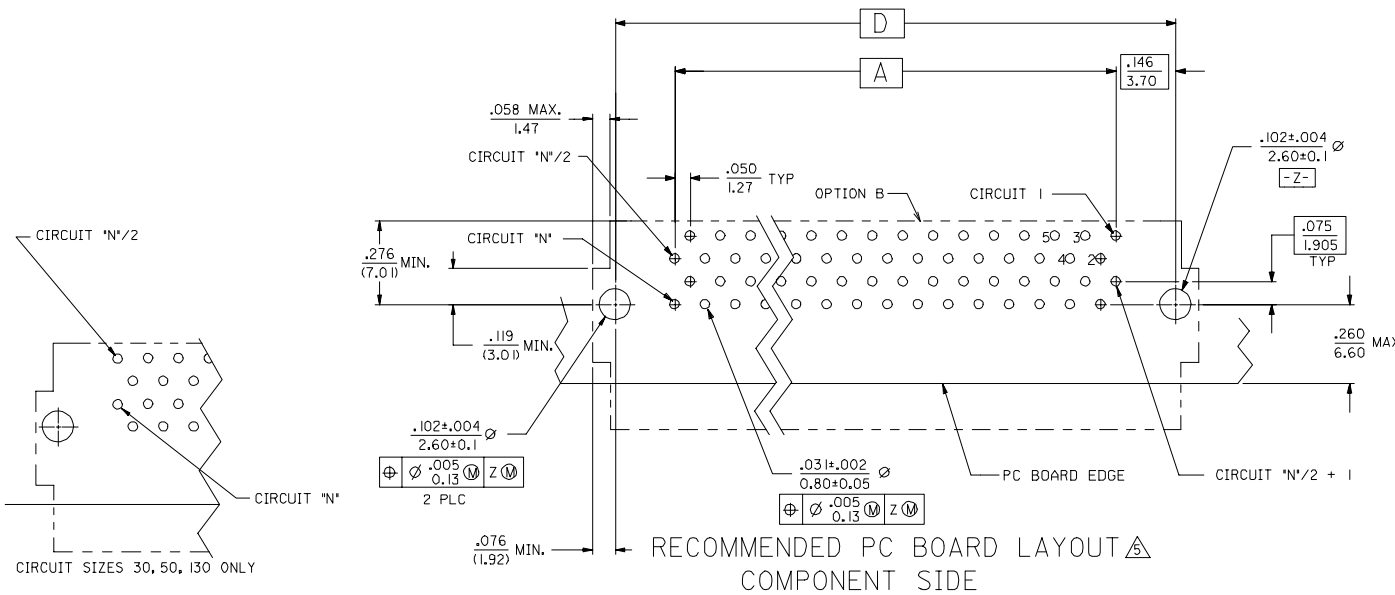


50 CIRCUIT ASSEMBLY SHOWN

		TRAY PACK PER SPEC. PK-70873-084*					END DETAIL OPTION 'A'
		D	C	B	A	CKT ('N')	ITEM NUMBER
.125 (3.18)	3.491 (88.68)	3.642 (92.50)	3.426 (87.02)	3.200 (81.28)	130		
	3.241 (82.33)	3.392 (86.15)	3.176 (80.67)	2.950 (74.93)	120		
	2.741 (69.63)	2.892 (73.45)	2.676 (67.97)	2.450 (62.23)	100		
	2.241 (56.93)	2.392 (60.75)	2.176 (55.27)	1.950 (49.53)	80		
	1.941 (49.31)	2.092 (53.13)	1.875 (47.65)	1.650 (41.91)	68		
	1.741 (44.23)	1.892 (48.05)	1.676 (42.57)	1.450 (36.83)	60	71661-2936	
	1.491 (37.88)	1.642 (41.70)	1.426 (36.22)	1.200 (30.48)	50		
	1.241 (31.53)	1.392 (35.35)	1.176 (29.87)	.950 (24.13)	40		
	.991 (25.18)	1.142 (29.00)	.925 (23.52)	.700 (17.78)	30		
	.110 (2.79)	3.491 (88.68)	3.642 (92.50)	3.426 (87.02)	3.200 (81.28)	130	
3.241 (82.33)		3.392 (86.15)	3.176 (80.67)	2.950 (74.93)	120		
2.741 (69.63)		2.892 (73.45)	2.676 (67.97)	2.450 (62.23)	100	71661-2910	
2.241 (56.93)		2.392 (60.75)	2.176 (55.27)	1.950 (49.53)	80	71661-2980	
1.941 (49.31)		2.092 (53.13)	1.875 (47.65)	1.650 (41.91)	68	71661-2968	
1.741 (44.23)		1.892 (48.05)	1.676 (42.57)	1.450 (36.83)	60	71661-2960	
1.491 (37.88)		1.642 (41.70)	1.426 (36.22)	1.200 (30.48)	50	71661-2950	
1.241 (31.53)		1.392 (35.35)	1.176 (29.87)	.950 (24.13)	40		
.991 (25.18)		1.142 (29.00)	.925 (23.52)	.700 (17.78)	30	71661-2930	

SEE SHEET 1 EIC NO: LUCP2009-1254 2008/12/19 DRWN:SBARRA 2009/01/06 CHK:BBARKER 2009/01/06 APPR:SMILLER 2009/01/06 REV DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) DIMENSION STYLE IN/MM 4 PLACES ±--- ±--- 3 PLACES ±--- ±.010 2 PLACES ±0.25 ±--- 1 PLACE ±--- ±--- ANGULAR ±1/2°	DRAWN BY DATE RKADAMS 2004/08/18 CHECKED BY DATE BBARKER 2004/08/18 APPROVED BY DATE SMILLER 2004/08/18	SCALE DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE SALES ASSEMBLY EBBI 50D RIGHT ANGLE PLUG CONNECTOR
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-71661-007	SHEET NO. 2 OF 2
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	MOLEX INCORPORATED				

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



RECOMMENDED PC BOARD LAYOUT
COMPONENT SIDE

TRAY PACK
PER SPEC.
PK-10873-084+
END DETAIL
OPTION 'A'

Circuit Size	Dimensions (mm)					Item Number
	1	2	3	4	5	
.125 (3.18)	3.491 (88.68)	3.642 (92.50)	3.426 (87.02)	3.200 (81.28)	130	
	3.241 (82.33)	3.392 (86.15)	3.176 (80.67)	2.950 (74.93)	120	
	2.741 (69.63)	2.892 (73.45)	2.676 (67.97)	2.450 (62.23)	100	
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	1.741 (44.23)	1.892 (48.05)	1.676 (42.57)	1.450 (36.83)	60	71661-2936
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	.991 (25.18)	1.142 (29.00)	.925 (23.52)	.700 (17.78)	30	
	.110 (2.79)	3.491 (88.68)	3.642 (92.50)	3.426 (87.02)	3.200 (81.28)	130
3.241 (82.33)		3.392 (86.15)	3.176 (80.67)	2.950 (74.93)	120	
2.741 (69.63)		2.892 (73.45)	2.676 (67.97)	2.450 (62.23)	100	71661-2910
2.241 (56.93)		2.392 (60.75)	2.176 (55.27)	1.950 (49.53)	80	71661-2980
1.941 (49.31)		2.092 (53.13)	1.875 (47.65)	1.650 (41.91)	68	71661-2968
1.741 (44.23)		1.892 (48.05)	1.676 (42.57)	1.450 (36.83)	60	71661-2960
1.491 (37.88)		1.642 (41.70)	1.426 (36.22)	1.200 (30.48)	50	71661-2950
1.241 (31.53)		1.392 (35.35)	1.176 (29.87)	.950 (24.13)	40	
.991 (25.18)		1.142 (29.00)	.925 (23.52)	.700 (17.78)	30	71661-2930

ADD 71661-2960 EC NO: UCP2008-047 DRWN: SBARRA 2007/08/29 CHK: BBARKER 2007/09/14 APPR: SMILLER 2007/09/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± ---	mm INCH	DRAWN BY RKADAMS DATE 08/18/2004	CHECKED BY BBARKER DATE 08/18/2004	APPROVED BY SMILLER DATE 08/18/2004	MATERIAL NO. DOCUMENT NO.	TITLE SALES ASSEMBLY EBB1 50D RIGHT ANGLE PLUG CONNECTOR	SHEET NO. 2 OF 2
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		ITEM NUMBER		SD-71661-007		MOLEX INCORPORATED			