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Part Number: [0876890003](#)
Status: **Active**
Overview: [sca2](#)
Description: 1.27mm (.050") Pitch SCA-2 Plug, Straddle Mount, Right Angle, Lead-free, 80 Circuits, 0.76µm (30µ") Gold (Au) Plating

Documents:

[3D Model](#) [Product Specification PS-87689-003 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

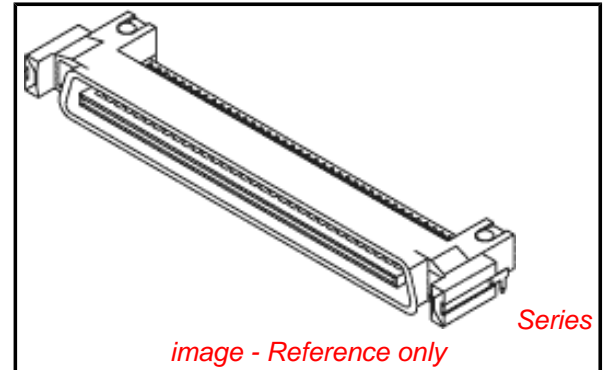
Product Family	PCB Headers
Series	87689
Application	Board-to-Board
Overview	sca2
Product Name	SCA-2

Physical

Breakaway	No
Circuits (Loaded)	80
Circuits (maximum)	80
Color - Resin	Black
Durability (mating cycles max)	500
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
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.045 In
PCB Thickness Recommended (mm)	1.20 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Plating min: Mating (µin)	30, 30.4
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	152.4
Plating min: Termination (µm)	3.81
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +85°C
Termination Interface: Style	Straddle Mount

Electrical

Current - Maximum per Contact	1.5A
Voltage - Maximum	30V



EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
 Not Reviewed
**Halogen-Free
Status**

China RoHS



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.

Search Parts in this Series

[87689Series](#)

Mates With

[71743 Vertical Receptacle, 80 Circuits](#)

Solder Process Data

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	263

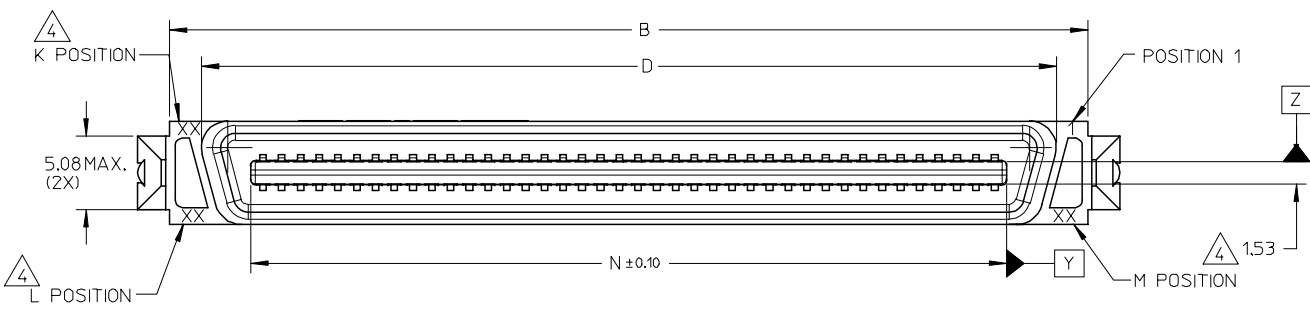
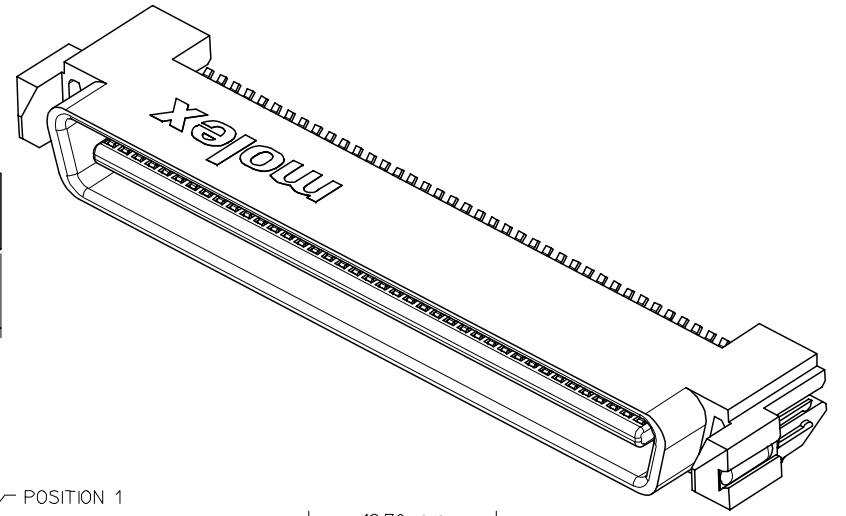
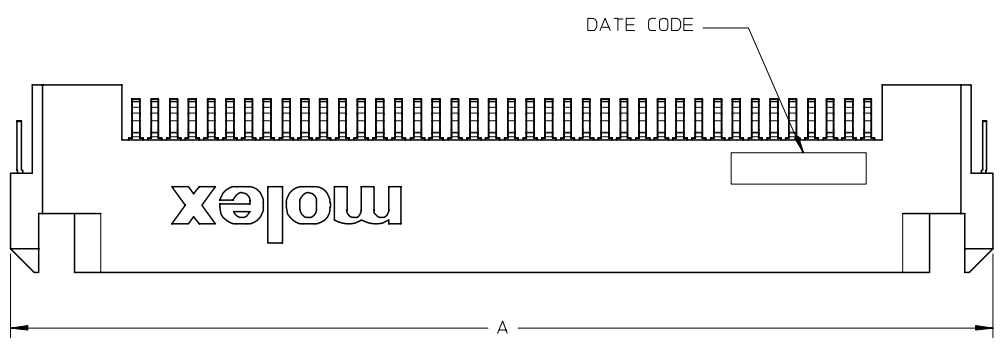
Material Info**Reference - Drawing Numbers**

Product Specification	PS-87689-003
Sales Drawing	SD-87689-039

This document was generated on 05/25/2010

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PART NUMBER	CKT SIZE	TERMINAL PLATING OPTION
87689-0003	80	0.76um MIN. GOLD AT CONTACT AREA, 3.81um MIN. TIN AT SOLDER-TAIL AREA, 1.27um MIN. NICKEL UNDER-PLATE ALL OVER.
87689-0004	40	0.76um MIN. GOLD AT CONTACT AREA, 0.05um MIN. GOLD FLASH AT SOLDER-TAIL AREA, 1.27um MIN. NICKEL UNDER-PLATE ALL OVER.
87689-0103	80	0.76um MIN. GOLD AT CONTACT AREA, 0.05um MIN. GOLD FLASH AT SOLDER-TAIL AREA, 1.27um MIN. NICKEL UNDER-PLATE ALL OVER.
87689-0104	40	0.76um MIN. GOLD AT CONTACT AREA, 0.05um MIN. GOLD FLASH AT SOLDER-TAIL AREA, 1.27um MIN. NICKEL UNDER-PLATE ALL OVER.



- NOTES:
- MATERIAL :
HOUSING : LCP, UL 94V-0 RATED. COLOR : BLACK
TERMINAL : BRASS
ESD CLIP : PHOSPHOR BRONZE
 - FINISH:
ESD CLIP: 3.81um MIN TIN ALL OVER WITH 1.27um MIN. NICKEL UNDERPLATE.
 - RECOMMENDED PCB THICKNESS : 1.10+0.10/-0.15mm
- △ K, L AND M INDICATES NUMBER OF TERMINAL POSITIONS.

ADDED P/N	2006/06/26
EC NO: S2006-0997	2006/06/26
DRWN:CGTAN	2006/06/26
CHKD:SHFONG	2006/06/26
APPR:KCLING	2006/06/26

QUALITY SYMBOLS	DESCRIPTION
▽=0	
△=0	

	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.15	± ---
1 PLACE	± ---	± ---
ANGULAR ± 1 °		

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
RSHAN	2003/08/21	SCA-2, 1.27MM PITCH PLUG CONNECTOR STRADDLE MOUNT		
CHECKED BY	DATE			
KCLING	2003/09/01			
APPROVED BY	DATE	MOLEX INCORPORATED		
SKTOH	2003/09/01	MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
SEE TABLE	SD-87689-039	1 OF 3		

SIZE A3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

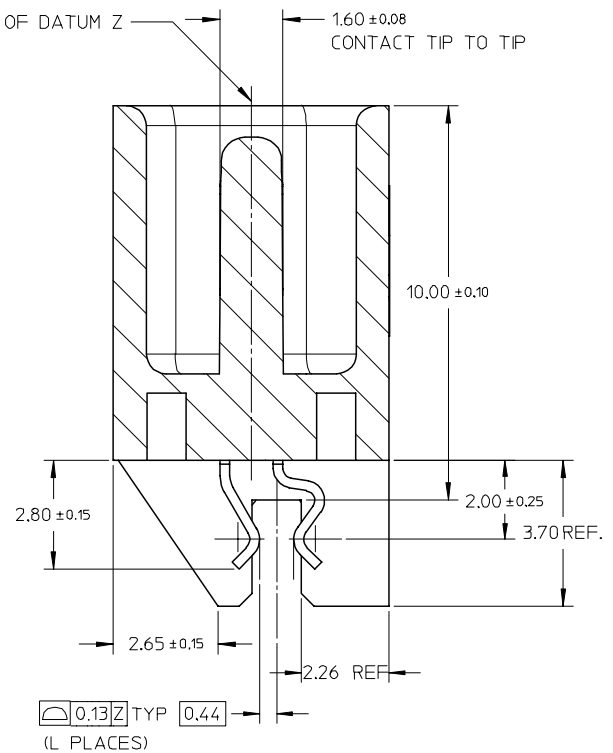
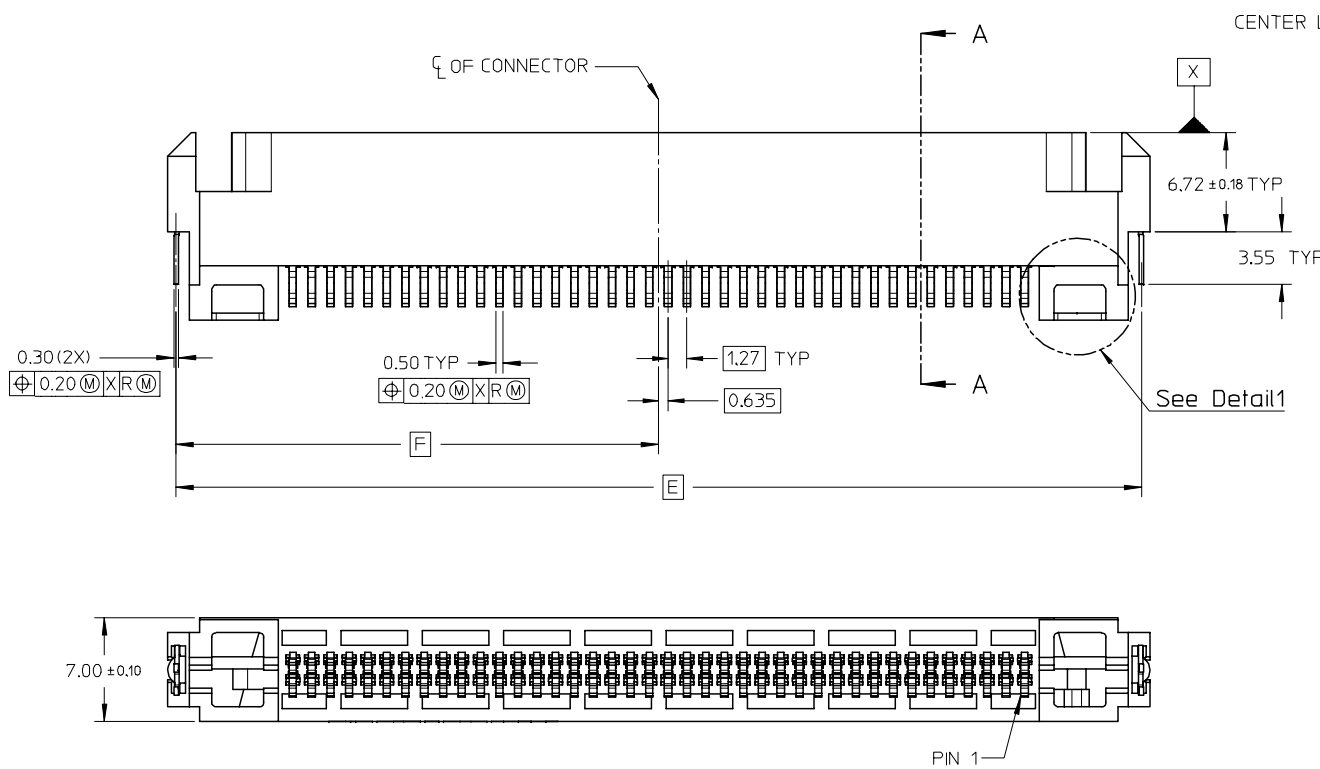
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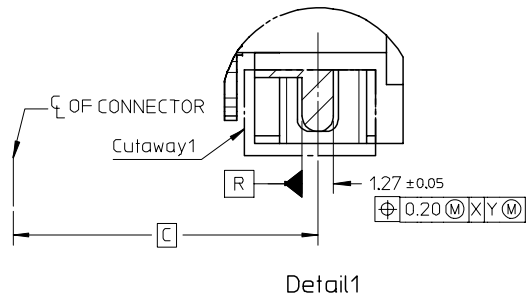
C

B

A



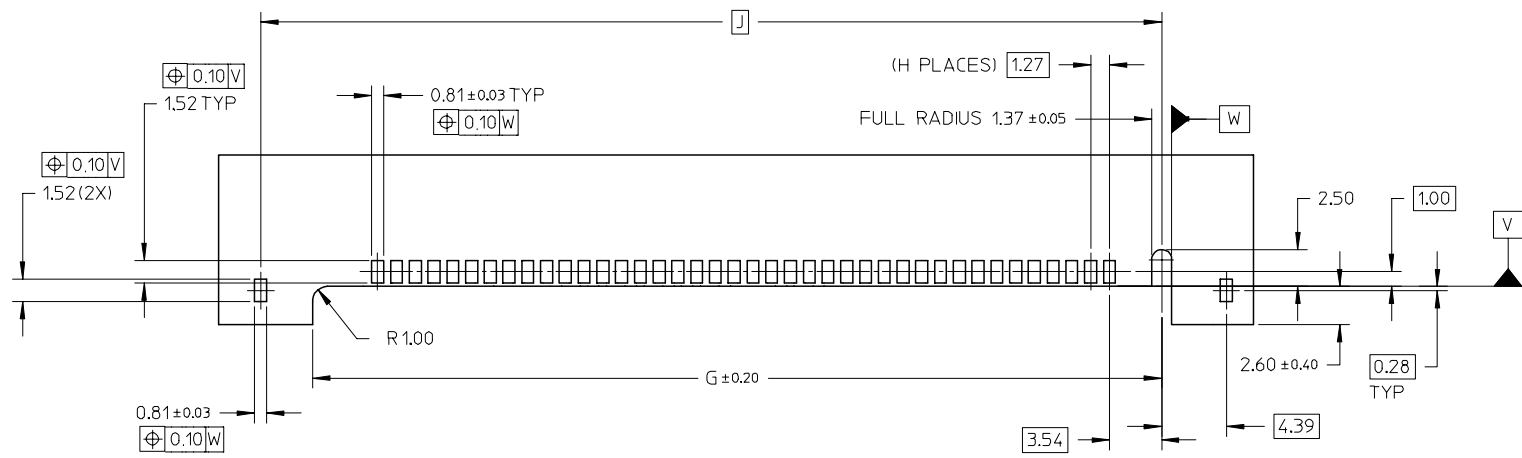
SECTION A-A



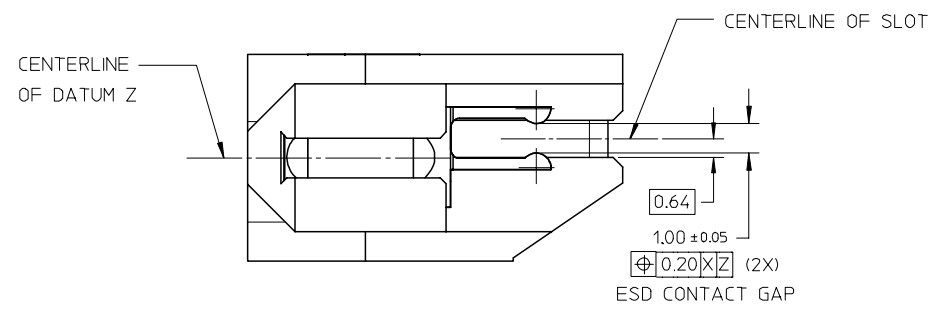
ADDED P/N EC NO: S2006-0997 DRWN: CGTAN CHKD: SHFONG APPR: KCLING	2006/06/26 2006/06/26 2006/06/26 2006/06/26	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.15 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	DRAWN BY RSHAN CHECKED BY KCLING APPROVED BY SKTOH	DATE 2003/08/21 DATE 2003/09/01 DATE 2003/09/01	TITLE SCA-2, 1.27MM PITCH PLUG CONNECTOR STRADDLE MOUNT		MOLEX INCORPORATED	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		DOCUMENT NO. SD-87689-039		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1				
CKT SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	PACKAGING
80	66.50	62.15	28.30	57.87	65.36	32.68	57.49	39	60.99	40	80	41	51.17	TRAY
40	41.10	36.75	15.60	32.47	39.96	19.98	32.09	19	35.59	20	40	21	25.77	TRAY



RECOMMENDED PCB LAYOUT



ADDED P/N EC NO: S2006-0997 DRWN: CGTAN CHKD: SHFONG APPR: KCLING	DESCRIPTION 2006/06/26 2006/06/26 2006/06/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
		$\nabla = 0$ $\triangle = 0$	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.15</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.15	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
			mm	INCH																		
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2 PLACES	± 0.15	± ---																				
1 PLACE	± ---	± ---																				
	ANGULAR ± 1 °																					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE																			

SCA-2, 1.27MM PITCH
PLUG CONNECTOR
STRADDLE MOUNT

MOLEX MOLEX INCORPORATED

DOCUMENT NO. SD-87689-039

SHEET NO. 3 OF 3