

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0876890004](#)  
**Status:** **Active**  
**Overview:** [sca2](#)  
**Description:** 1.27mm (.050") Pitch SCA-2 Plug, Straddle Mount, Right Angle, Lead-free, 40 Circuits, 0.76µm (30µ") Gold (Au) Plating

**Documents:**

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

**General**

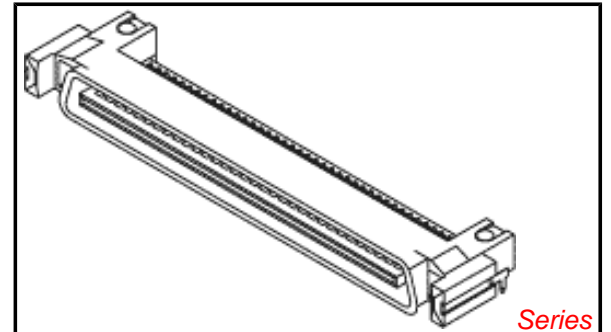
Product Family	PCB Headers
Series	<a href="#">87689</a>
Application	Board-to-Board
Overview	<a href="#">sca2</a>
Product Name	SCA-2

**Physical**

Breakaway	No
Circuits (Loaded)	40
Circuits (maximum)	40
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



*image - Reference only*

**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](mailto: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, 40 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

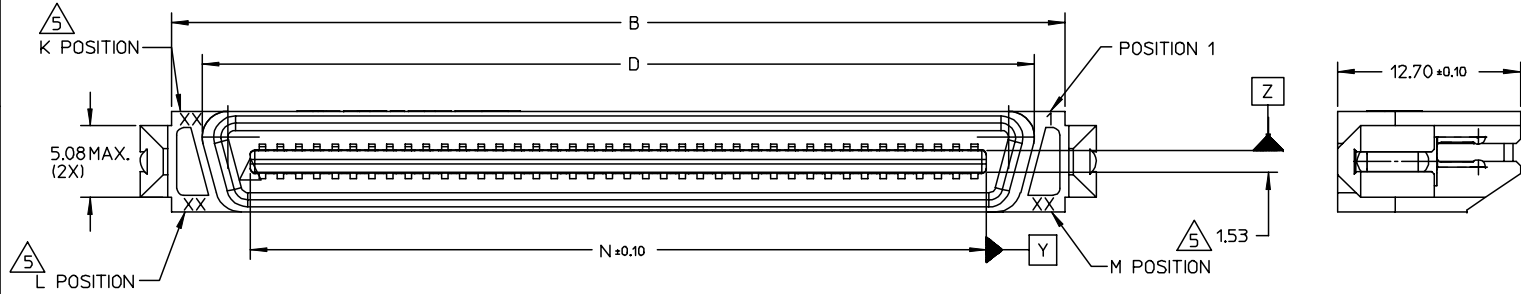
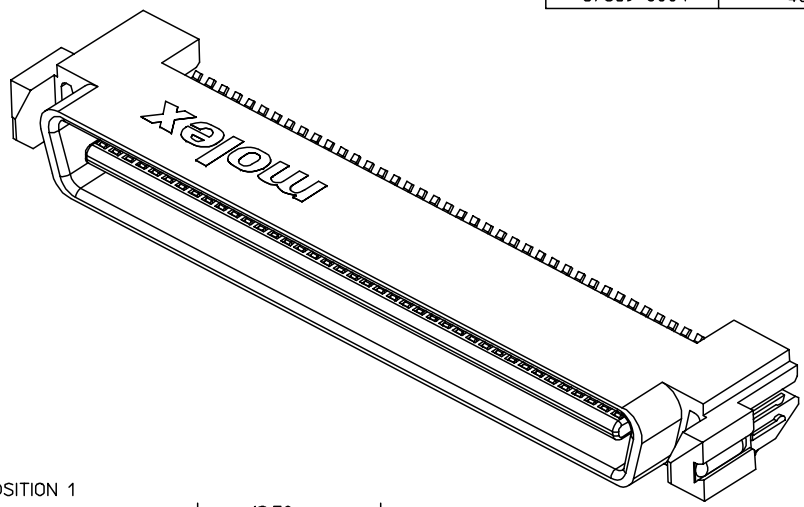
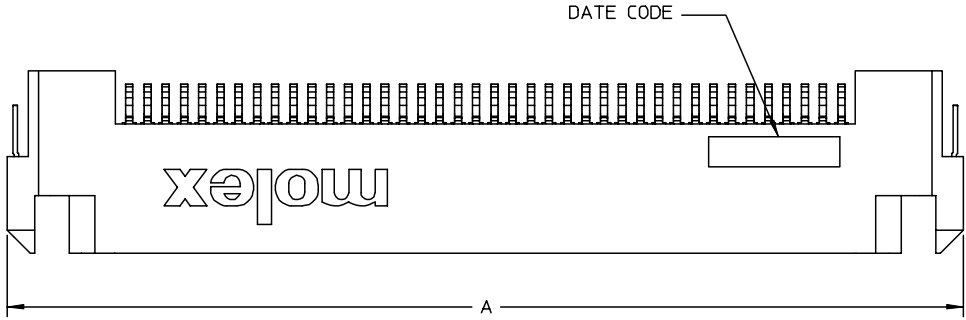
**Material Info****Reference - Drawing Numbers**

Product Specification	PS-87689-003
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This document was generated on 05/25/2010

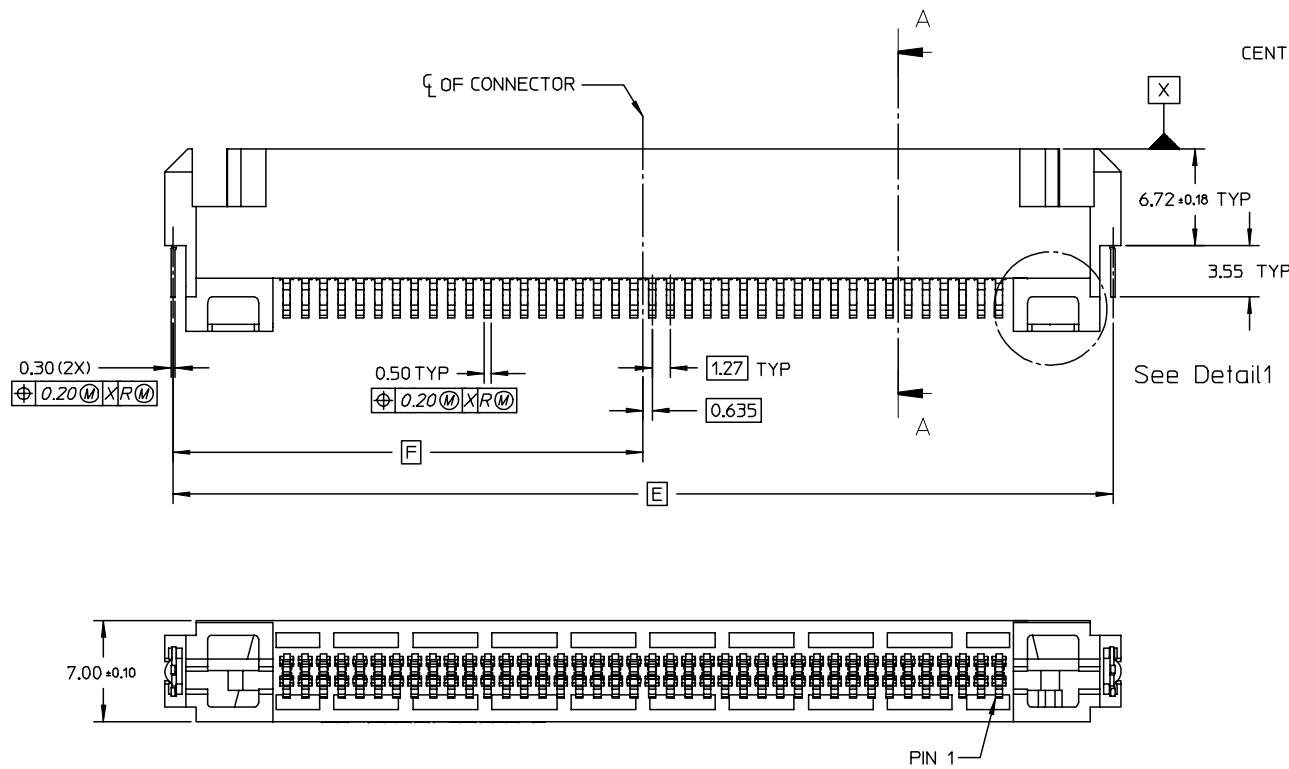
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87689	
PART NUMBER	CKT SIZE
87689-0003	80
87689-0004	40

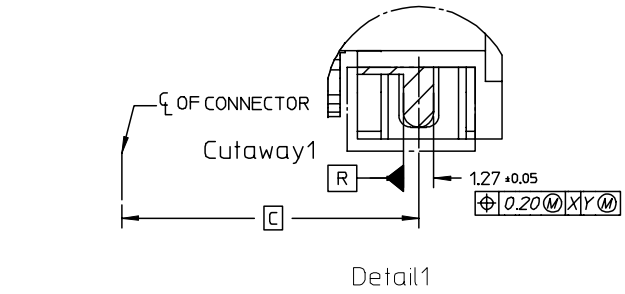


- NOTES:
- MATERIAL :  
HOUSING : LCP, UL 94V-0 RATED, COLOR : BLACK  
TERMINAL : BRASS  
ESD CLIP : PHOSPHOR BRONZE
  - FINISH:  
TERMINAL: 0.76um MIN GOLD AT CONTACT AREA, 3.81um MIN PURE TIN AT SOLDER TAIL AREA, 1.27mm NICKEL UNDERPLATE ALL OVER  
ESD CLIP: 3.81um MIN PURE TIN ALL OVER WITH 1.27um MIN. NICKEL UNDERPLATE.
  - RECOMMENDED PCB THICKNESS : 1.10+0.10/-0.15mm
- △K,L AND M INDICATES NUMBER OF TERMINAL POSITIONS.

EC NO: S2004-0081 DRWN:RSHAN 2003/09/01 CHKD:KCLING 2003/09/01 APPR:SKTOH 2003/09/03	QUALITY SYMBOLS ▽ = 0 ▽C = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
			mm	INCH	DIMENSION STYLE MM ONLY		TITLE
A	DESCRIPTION	4 PLACES	± ---	± ---	DRAWN BY RSHAN	DATE 2003/08/21	SCA-2 PLUG ASSEMBLY STRADDLE MOUNT 1.27MM PITCH
		3 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2003/09/01	
		2 PLACES	± 0.15	± ---	APPROVED BY SKTOH	DATE 2003/09/01	MATERIAL NO. SEE TABLE
		1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE		DOCUMENT NO. SD-87689-039
		ANGULAR ± 1 °		MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 3	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

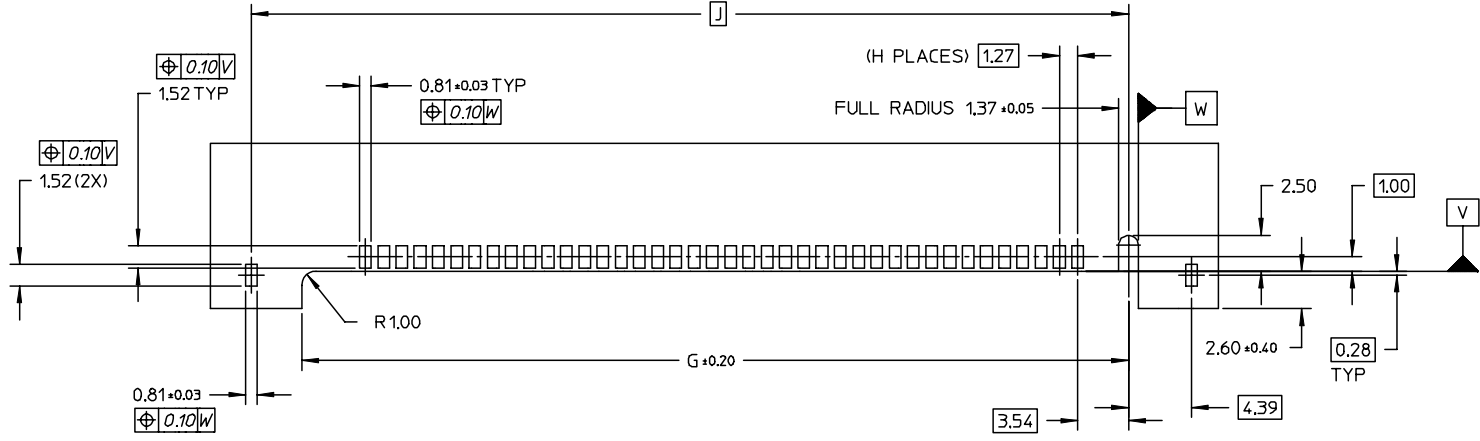


SECTION A-A

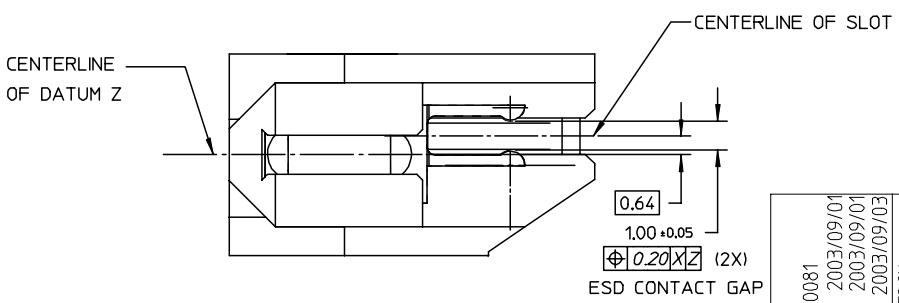


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		mm	INCH	METRIC	METRIC		
DESCRIPTION	4 PLACES	± ---	± ---	DIMENSION STYLE		TITLE	
	3 PLACES	± ---	± ---	MM ONLY		SCA-2 PLUG ASSEMBLY STRADDLE MOUNT 1.27MM PITCH	
REV	2 PLACES	± 0.15	± ---	DRAWN BY	DATE	MOLEX INCORPORATED	
	1 PLACE	± ---	± ---	RSHAN	2003/08/21	MATERIAL NO. SEE TABLE	
	ANGULAR ± 1 °			CHECKED BY	DATE	DOCUMENT NO.	SHEET NO.
	DRAFT WHERE APPLICABLE			KCLING	2003/09/01	SD-87689-039	2 OF 3
	MUST REMAIN WITHIN DIMENSIONS			APPROVED BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
				SKTOH	2003/09/01		

	10	9	8	7	6	5	4	3	2					
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



EC NO: S2004-0081 DRWN:RSHAN 2003/09/01 CHKD:KCLING 2003/09/01 APPR:SKTOH 2003/09/03	QUALITY SYMBOLS ▽ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		mm	INCH	DIMENSION STYLE MM ONLY	TITLE	SCA-2 PLUG ASSEMBLY STRADDLE MOUNT 1.27MM PITCH	
A	DESCRIPTION	4 PLACES ± --- ± ---	DRAWN BY RSHAN	DATE 2003/08/21	MOLEX INCORPORATED		
		3 PLACES ± --- ± ---	CHECKED BY KCLING	DATE 2003/09/01			
		2 PLACES ± 0.15 ± ---	APPROVED BY SKTOH	DATE 2003/09/01	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87689-039	SHEET NO. 3 OF 3
		1 PLACE ± --- ± ---	DRAFT WHERE APPLICABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		ANGULAR ± 1 °	MUST REMAIN WITHIN DIMENSIONS				