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Part Number: [0876411001](#)
Status: **Active**
Overview: [sca2](#)
Description: 1.27mm (.050") Pitch SCA-2 Plug, Surface Mount, Right Angle, 80 Circuits, 0.76µm (30µ") Gold (Au) Plating, with Plastic Locating Pegs, Lead-free

Documents:

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

General

Product Family	PCB Headers
Series	87641
Application	Board-to-Board
Overview	sca2
Product Name	SCA-2

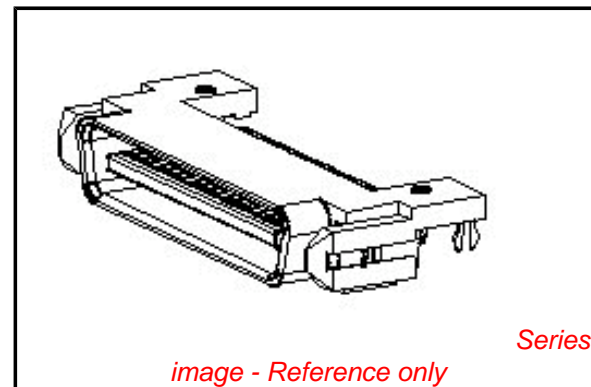
Physical

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	Phosphor Bronze
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	Yes
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Plating min: Mating (µin)	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
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-55°C to +85°C
Termination Interface: Style	Surface Mount

Electrical

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

Solder Process Data



EU RoHS

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

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

[87641Series](#)

Mates With

[73829](#) PCB Receptacle with Beveled Metal Pins. [87557](#) SCA-2 Receptacle with Beveled Metal Pins. [73826](#) PCB Receptacle with Press-fit PC Tails. [71743](#) PCB Receptacle Vertical SCA-2. [71744](#) PCB Receptacle with Extended Height

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

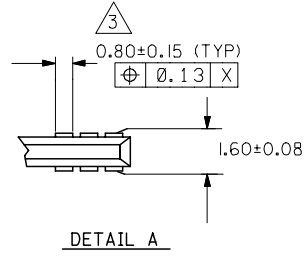
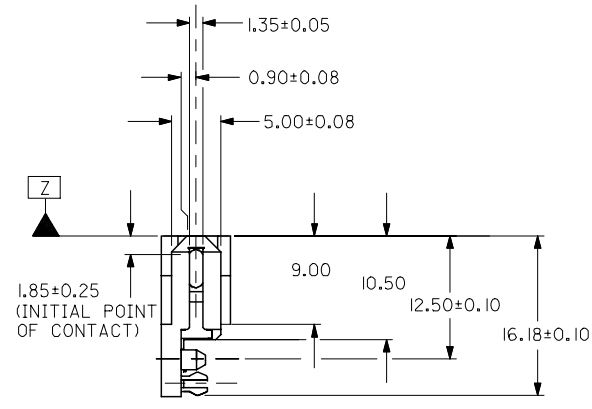
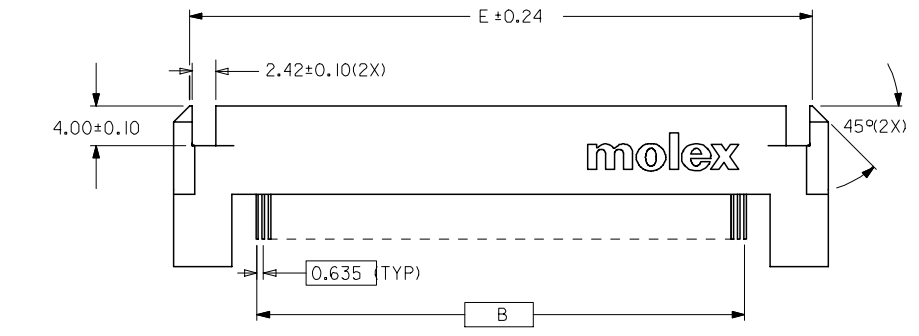
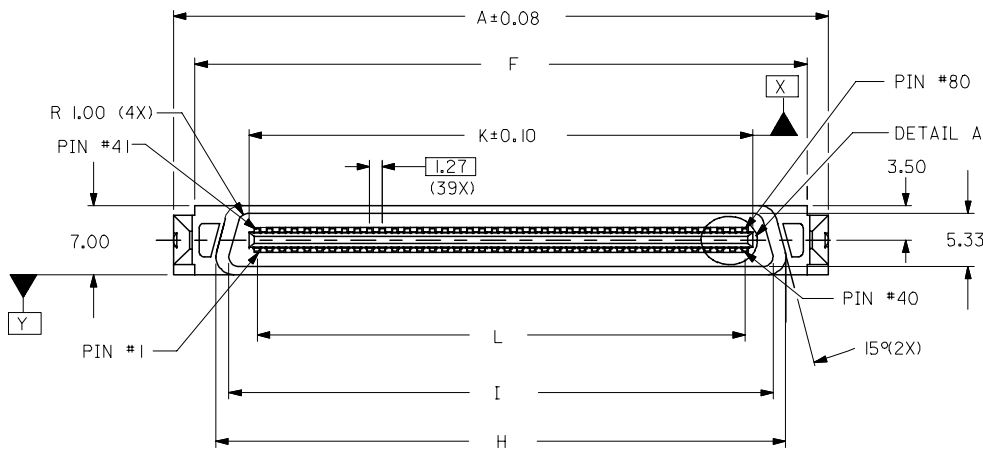
Reference - Drawing Numbers

Sales Drawing	SD-87641-001
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This document was generated on 05/25/2010

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PART NUMBER	CKT	A	B	C	D	E	F
87641-1001	80	66.50	50.165	66.40	64.50	63.30	62.15
87641-1002	40	41.10	24.765	41.00	39.10	37.90	36.75
		G	H	I	J	K	L
		58.42	57.87	55.27	54.70	51.17	49.53
		33.02	32.47	29.87	29.30	25.77	24.13



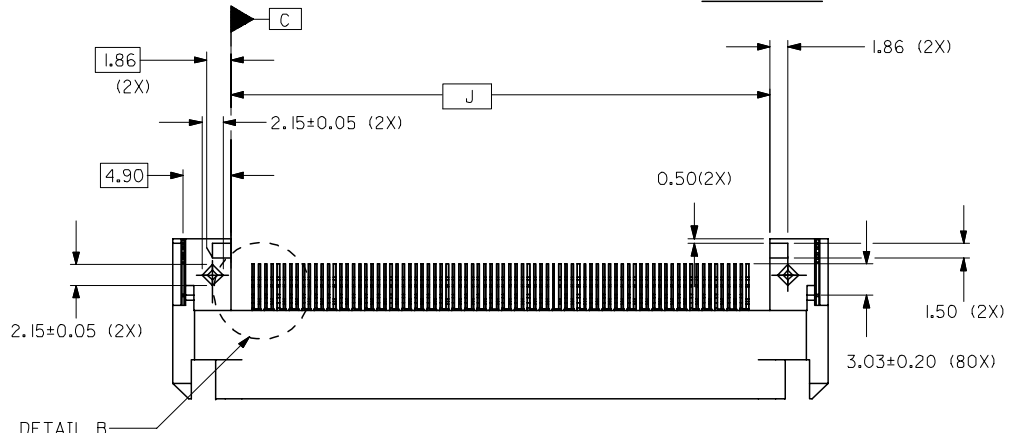
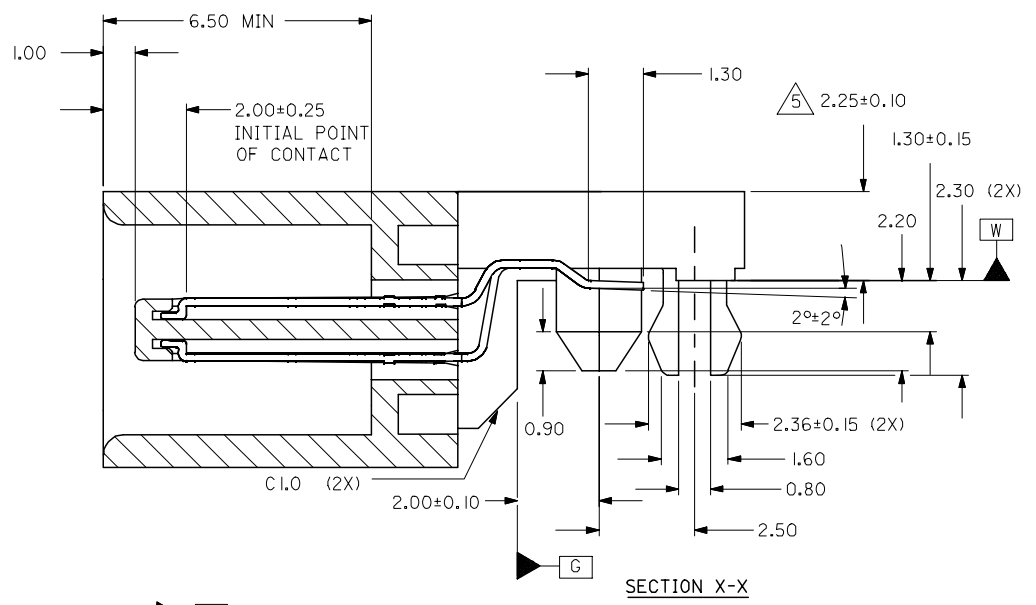
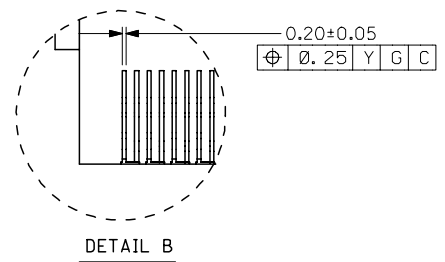
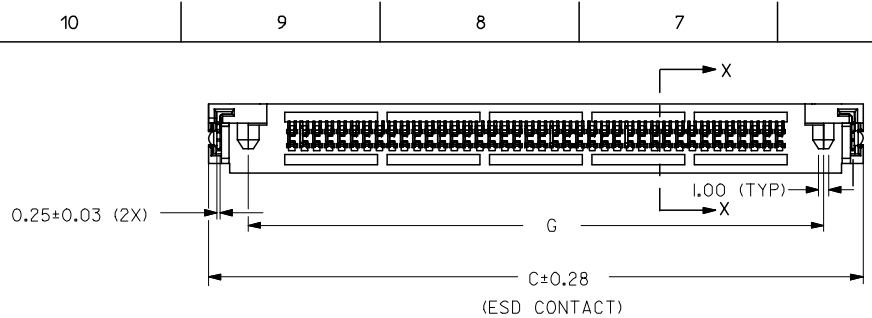
REV	DESCRIPTION
D	OBS TIN/LEAD P/N EC NO: S2006-0817 DRWN:MLONG CHKD:CGTAN APPR:KCLING

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽C=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.30	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	

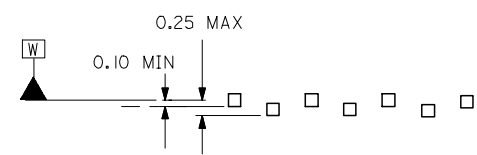
DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
NAGESH	2000/07/22
CHECKED BY	DATE
KCLING	2000/08/11
APPROVED BY	DATE
SKTOH	2000/08/11

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	☉
TITLE		
SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT		
MATERIAL NO.		
SD-87641-001		
DOCUMENT NO.		SHEET NO.
SD-87641-001		1 OF 3



NOTE:

- MATERIAL :
HOUSING:LCP, UL RATED 94V-0 COLOUR BLACK
CONTACTS: COPPER ALLOY
ESD CLIP : COPPER ALLOY
- PLATING:
CONTACTS: 1.27 μ m MIN. NICKEL UNDERPLATE ALL OVER,
0.76 μ m MIN. GOLD PLATE AT CONTACT AREA
AND 3.81 μ m MIN. TIN ON SOLDER TAILS.
ESD CLIP: 1.27 μ m MIN. NICKEL UNDERPLATE ALL
OVER WITH 3.81 μ m MIN. TIN ALL OVER.
- CONTACT MUST BE ABOVE PLASTIC ALONG EFFECTIVE MATING AREA
- 80 CKT IS SHOWN FOR ILLUSTRATION PURPOSE ONLY
- THE MAX OFFSET BETWEEN THE LEFT AND THE RIGHT SHOULDERS IS
 ± 0.06 MM



OBS TIN/LEAD P/N EC NO: S2006-0817 DRWN:MLONG CHKD:CGTAN APPR:KCLING	2006/04/11 2006/04/12 2006/04/12	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			$\nabla=0$ $\nabla C=0$	mm	INCH	MM ONLY	NTS	METRIC			
			4 PLACES \pm ---	\pm ---	DRAWN BY	DATE	TITLE	MOLEX INCORPORATED			
			3 PLACES \pm ---	\pm ---	NAGESH	2000/07/22	SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT				
2 PLACES \pm 0.30	\pm ---	CHECKED BY	DATE								
1 PLACE \pm ---	\pm ---	KCLING	2000/08/11								
			ANGULAR \pm 3°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY		DATE	DOCUMENT NO.	SHEET NO.	
						SKTOH		2000/08/11	SD-87641-001	2 OF 3	
						MATERIAL NO.					
						SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
						A3					

10 9 8 7 6 5 4 3 2 1

F F

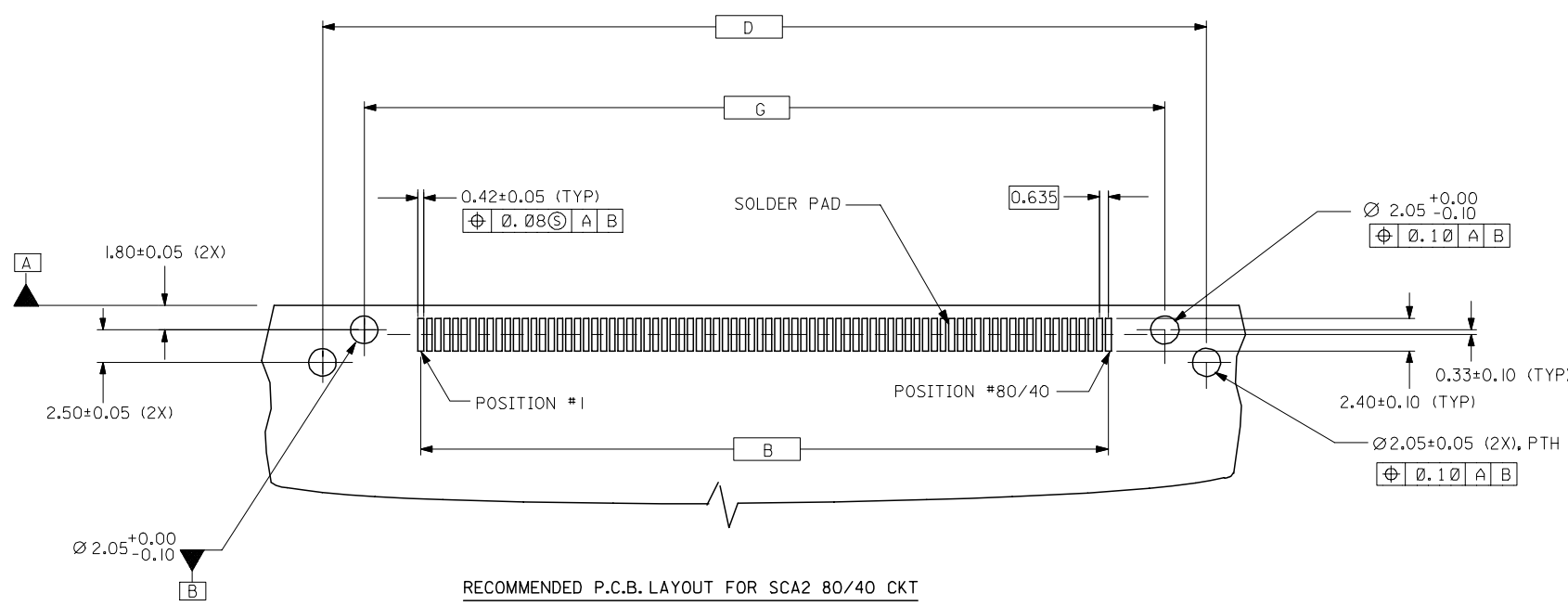
E E

D D

C C

B B

A A



RECOMMENDED P.C.B. LAYOUT FOR SCA2 80/40 CKT

OBS TIN/LEAD P/N EC NO: S2006-0817 DRWN:MLONG CHKD:CGTAN APPR:KCLING	2006/04/11 2006/04/12 2006/04/12	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			▼=0 ▽=0	mm INCH	MM ONLY	NTS	METRIC	
				4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.30 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3°	DRAWN BY DATE NAGESH 2000/07/22 CHECKED BY DATE KCLING 2000/08/11 APPROVED BY DATE SKTOH 2000/08/11	TITLE SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87641-001	SHEET NO. 3 OF 3		

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9 8 7 6 5 4 3 2 1