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Part Number: [0876411002](#)
Status: **Active**
Overview: [sca2](#)
Description: 1.27mm (.050") Pitch SCA-2 Plug, Surface Mount, Right Angle, 40 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

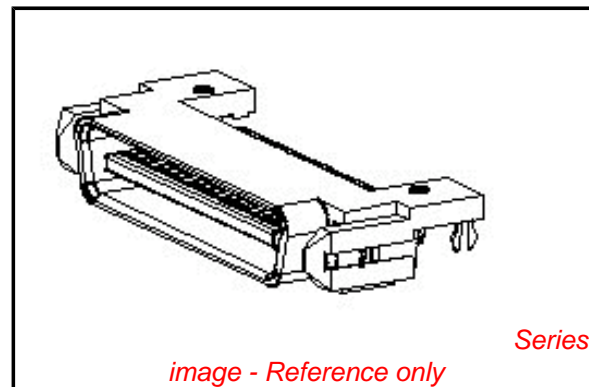
Physical

Breakaway	No
Circuits (Loaded)	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	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

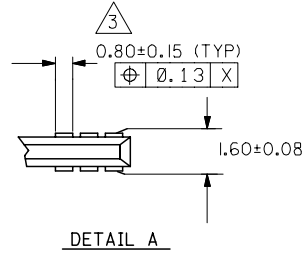
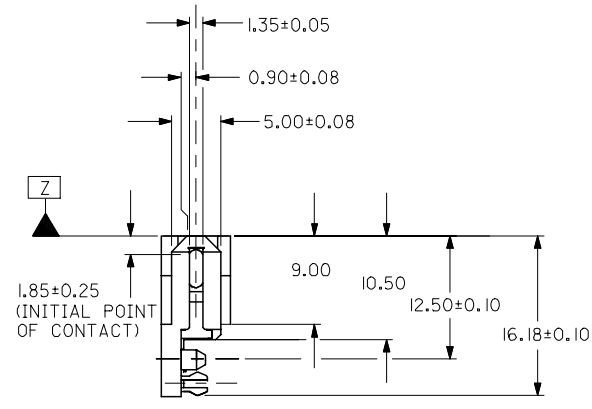
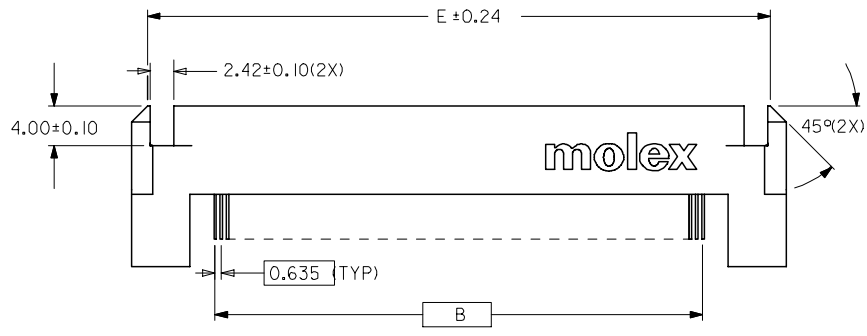
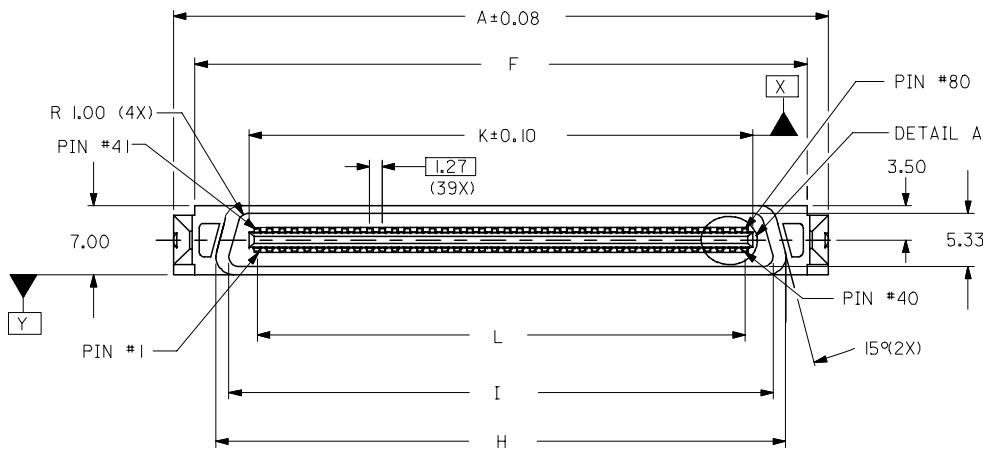
Reference - Drawing Numbers

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



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

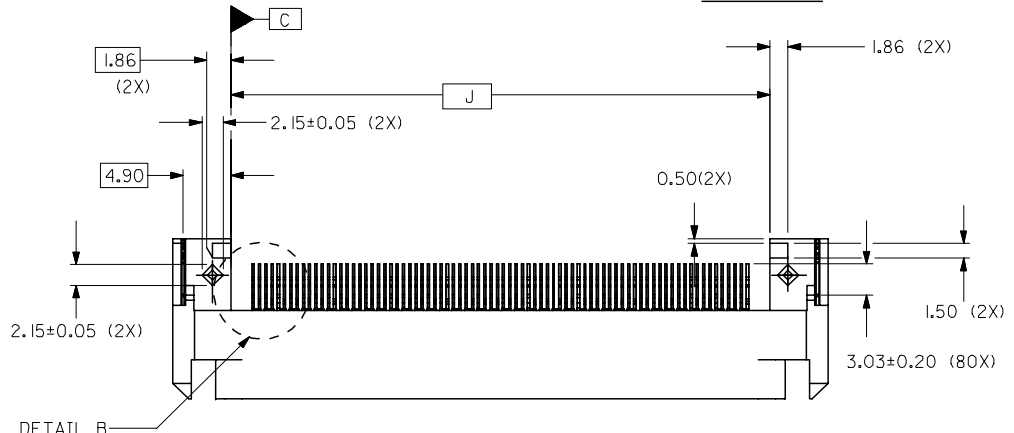
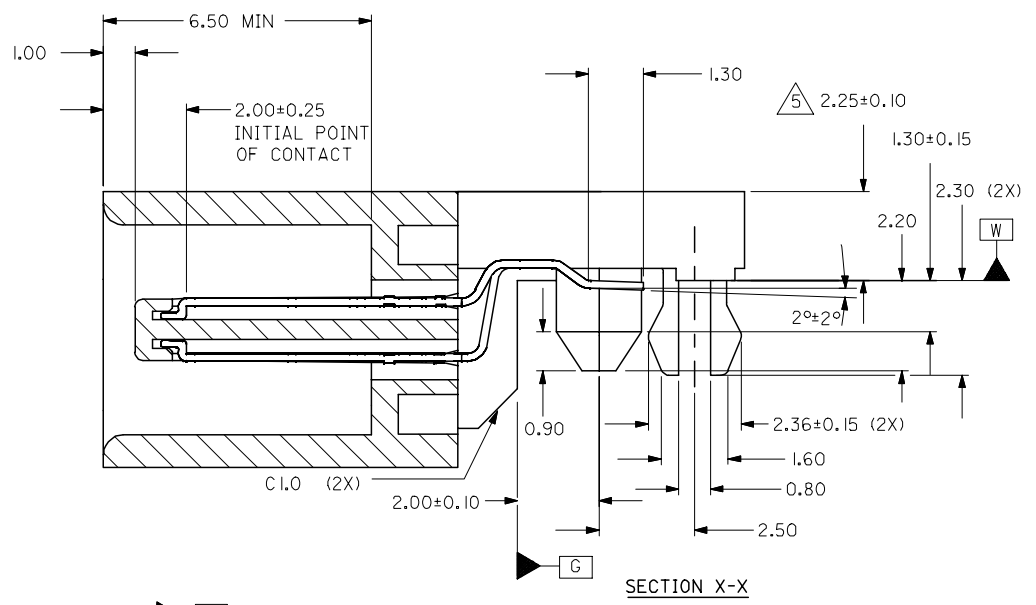
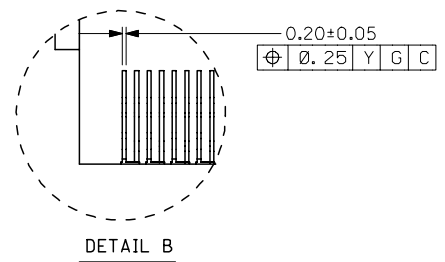
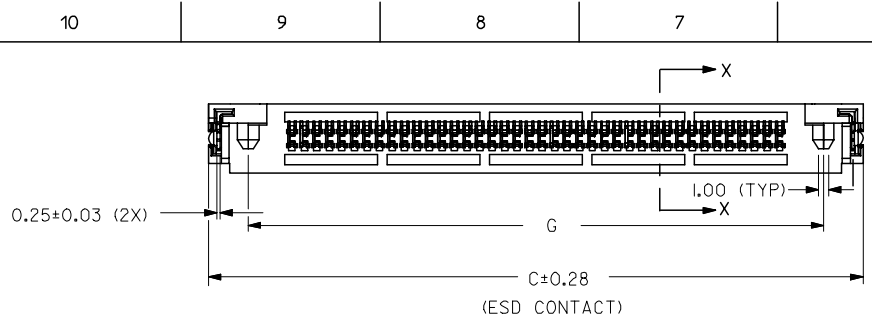
REV	DESCRIPTION
D	

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ±---	±---
▽C=0	3 PLACES ±---	±---
	2 PLACES ±0.30	±---
	1 PLACE ±---	±---
	ANGULAR ± 3°	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
NAGESH	2000/07/22	SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT		
CHECKED BY	DATE	MOLEX INCORPORATED		
KCLING	2000/08/11	SD-87641-001		
APPROVED BY	DATE	SHEET NO.		
SKTOH	2000/08/11	1 OF 3		

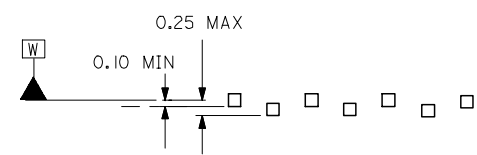
MOLEX INCORPORATED
 SD-87641-001
 SHEET NO. 1 OF 3

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



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	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▽=0 ∇=0	mm	INCH	MM ONLY	NTS	METRIC		
			4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE		
			3 PLACES ± ---	± ---	NAGESH	2000/07/22	SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT		
	2 PLACES ± 0.30	± ---	CHECKED BY	DATE					
	1 PLACE ± ---	± ---	KCLING	2000/08/11					
		ANGULAR ± 3°	APPROVED BY	DATE					
			SKTOH	2000/08/11					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO.					
			SEE TABLE	SD-87641-001					
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 2 OF 3		

10 9 8 7 6 5 4 3 2 1

F F

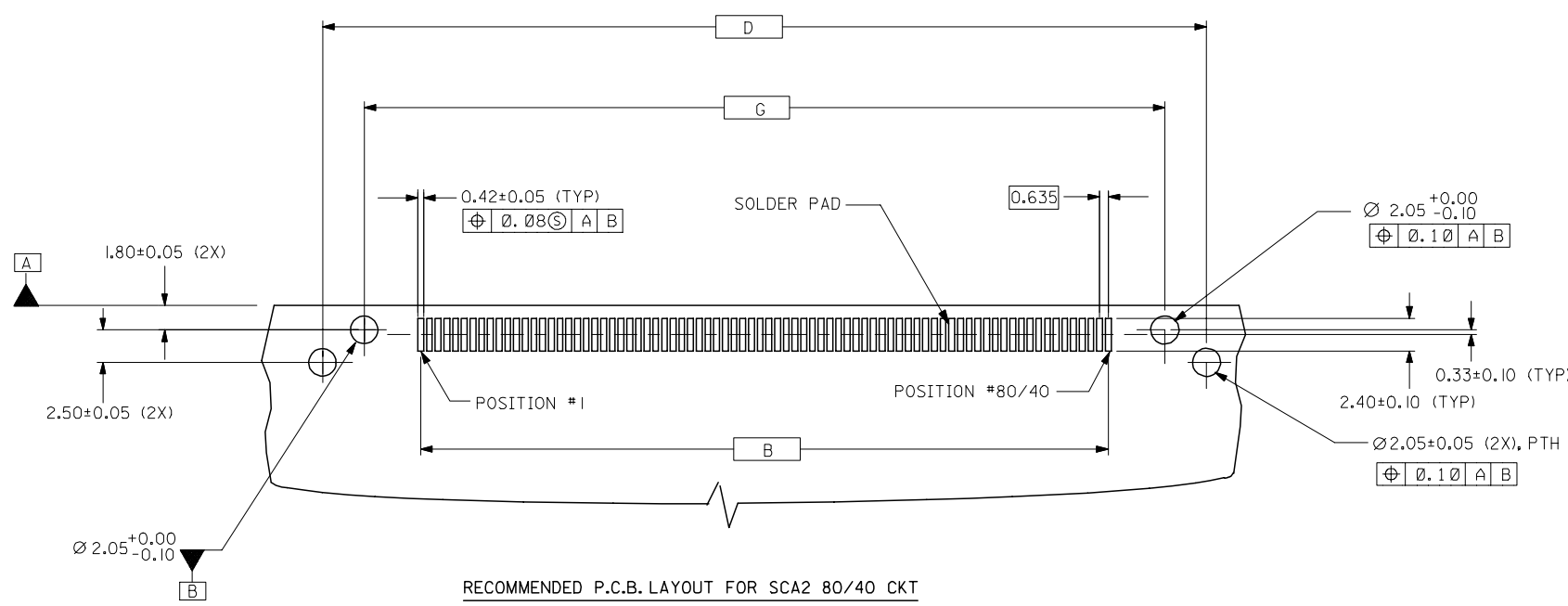
E E

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	REV D	DESCRIPTION 2006/04/11 2006/04/12 2006/04/12	QUALITY SYMBOLS ▽=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY NAGESH	DATE 2000/07/22	TITLE SCA-2, 1.27MM PITCH, SIL PLUG, W/LOC. PEG, SMT			
				4 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2000/08/11	MOLEX INCORPORATED			
				3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2000/08/11	DOCUMENT NO. SD-87641-001			
				2 PLACES	± 0.30	± ---	MATERIAL NO. SEE TABLE		SHEET NO. 3 OF 3			
				1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
				ANGULAR ± 3 °								

9 8 7 6 5 4 3 2 1