

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0876411012](#)
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 Metal 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

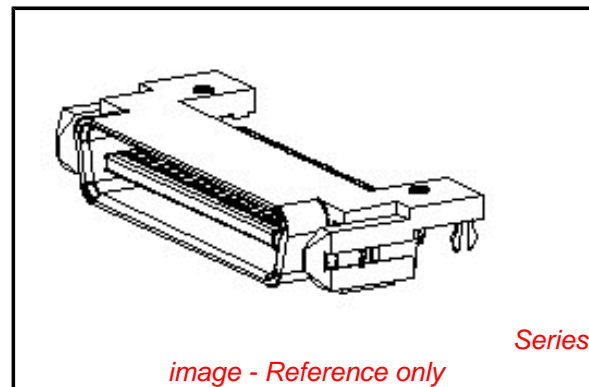
Physical

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
 Not Reviewed

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	260

Material Info

Reference - Drawing Numbers

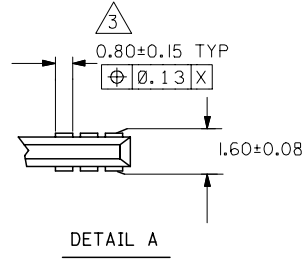
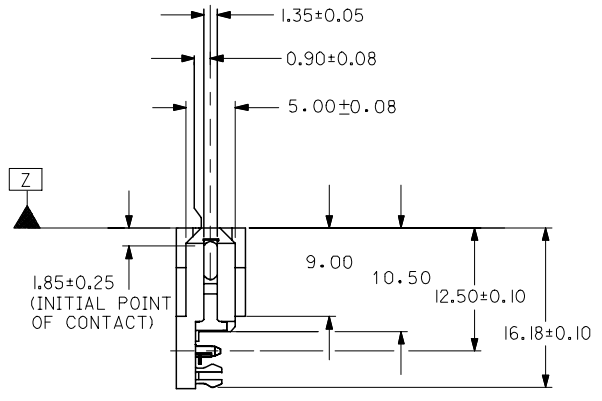
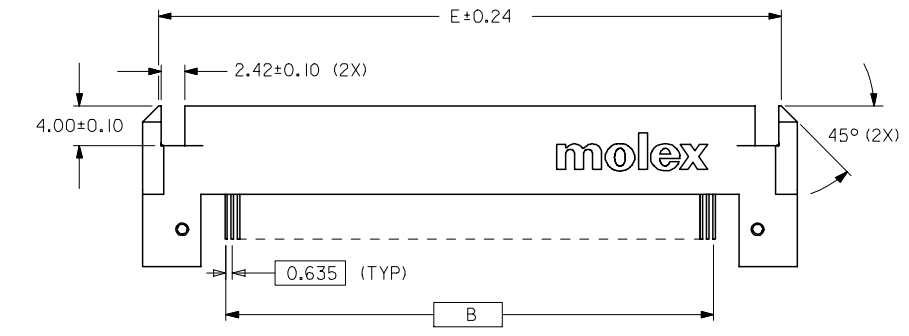
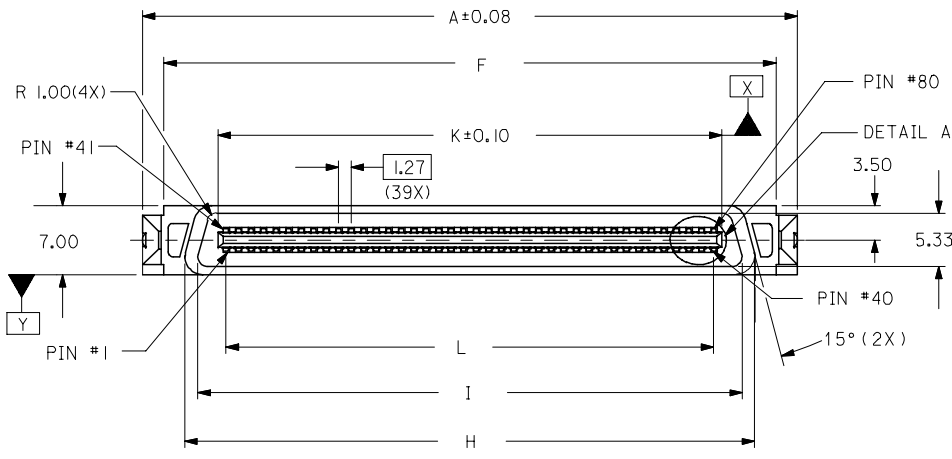
Sales Drawing	SD-87641-011
---------------	--------------

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

10 9 8 7 6 5 4 3 2 1

PART NUMBER	CKT	A	B	C	D	E	F
87641-1011	80	66.50	50.165	66.40	64.50	63.30	62.15
87641-1012	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	2006/04/11
EC NO: S2006-0817	2006/04/12
DRWN:MLONG	2006/04/12
CHKD:CGTAN	2006/04/12
APPR:KCLING	2006/04/12

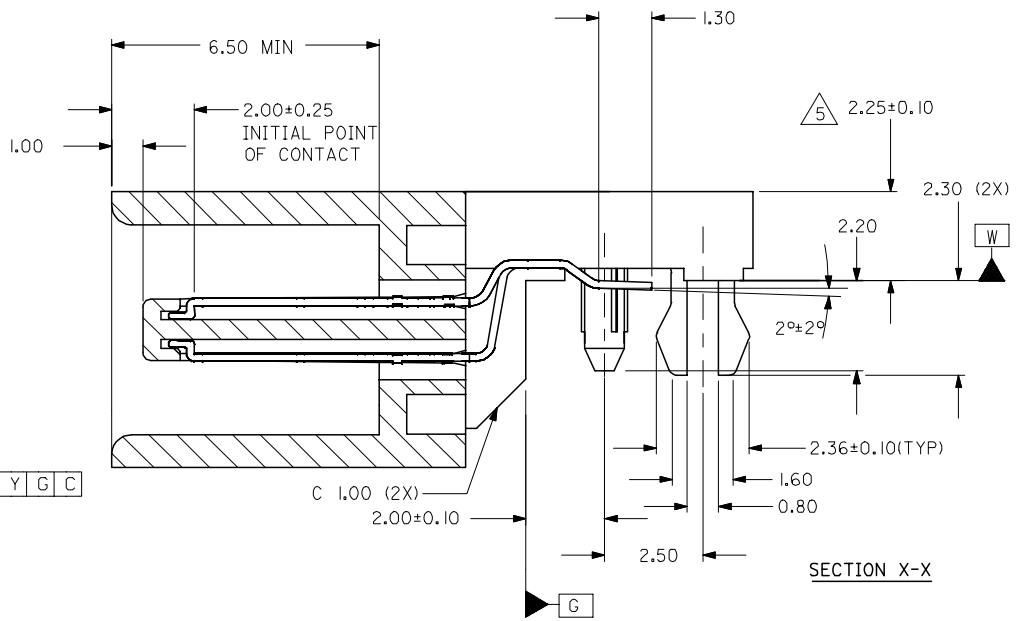
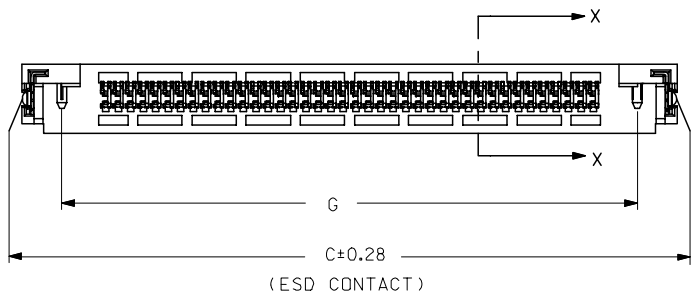
QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽C=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ±---	±---
3 PLACES ±---	±---
2 PLACES ±0.30	±---
1 PLACE ±---	±---
ANGULAR ± 3°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
NAGESHKN	2000/07/22
CHECKED BY	DATE
PTL IM	2000/08/28
APPROVED BY	DATE
SKTOH	2000/08/28
MATERIAL NO.	
SEE TABLE	

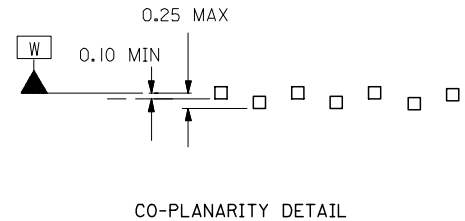
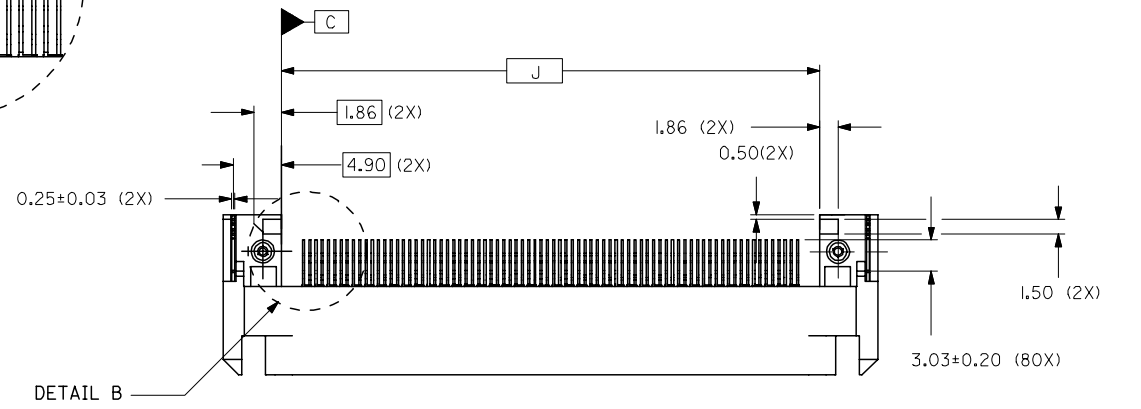
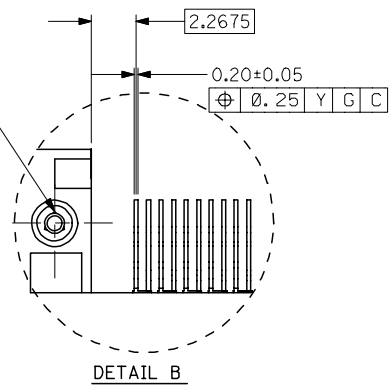
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
NTS	METRIC		
TITLE			
SCA-2, 1.27MM PITCH PLUG, SIL W/METAL LOC. PEG, SMT			
MOLEX INCORPORATED			SHEET NO.
SD-87641-011			1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1



NOTE:

- MATERIAL :
 HOUSING: LCP, UL RATED 94V-0 COLOUR BLACK
 CONTACTS: COPPER ALLOY
 ESD CLIP : COPPER ALLOY
 LOCATING PIN : 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.
 RETENTION CLIP: 1.27 μ m MIN. NICKEL UNDERPLATE ALL
 OVER WITH 3.81 μ m MIN. TIN ALL OVER.
 LOCATING PIN: 3.81 μ m TIN OVERALL OVER
 0.50 μ m COPPER OVERALL.
- CONTACT MUST BE ABOVE PLASTIC ALONG EFFECTIVE MATING AREA
- 80 CKT IS SHOWN FOR ILLUSTRATION PURPOSE ONLY
- THE MAXIMUM OFFSET BETWEEN THE LEFT AND THE RIGHT SHOULDERS IS
 ± 0.06 MM



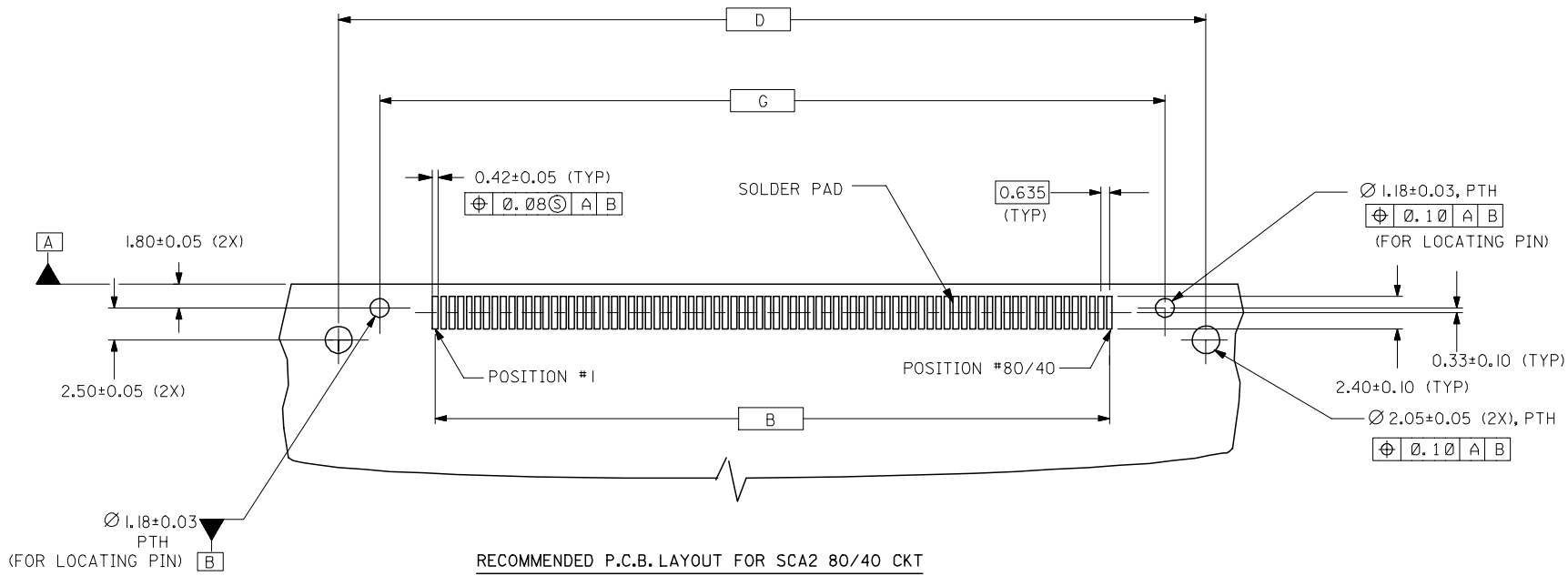
OBS	TIN/LEAD P/N	2006/04/11
EC NO:	S2006-0817	2006/04/12
DRWN:	M LONG	2006/04/12
CHKD:	CG TAN	2006/04/12
APPR:	KCL ING	2006/04/12
REV	DESCRIPTION	

QUALITY SYMBOLS	$\nabla=0$
	$\triangle=0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM ONLY
4 PLACES	± 0.10
3 PLACES	± 0.15
2 PLACES	± 0.30
1 PLACE	± 0.50
ANGULAR $\pm 3^\circ$	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
NAGESHKN	2000/07/22
CHECKED BY	DATE
PTL IM	2000/08/28
APPROVED BY	DATE
SKTOH	2000/08/28
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
SCA-2, 1.27MM PITCH		
PLUG, SIL		
W/METAL LOC. PEG, SMT		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87641-011	2 OF 3	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



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			
				4 PLACES	± ---	± ---	DRAWN BY NAGESHKN	DATE 2000/07/22	TITLE SCA-2, 1.27MM PITCH PLUG, SIL W/METAL LOC. PEG, SMT				
				3 PLACES	± ---	± ---	CHECKED BY PTL IM	DATE 2000/08/28					
				2 PLACES	± 0.30	± ---	APPROVED BY SKTOH	DATE 2000/08/28	MOLEX INCORPORATED				
1 PLACE	± ---	± ---	ANGULAR ± 3 °		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87641-011		SHEET NO. 3 OF 3				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							