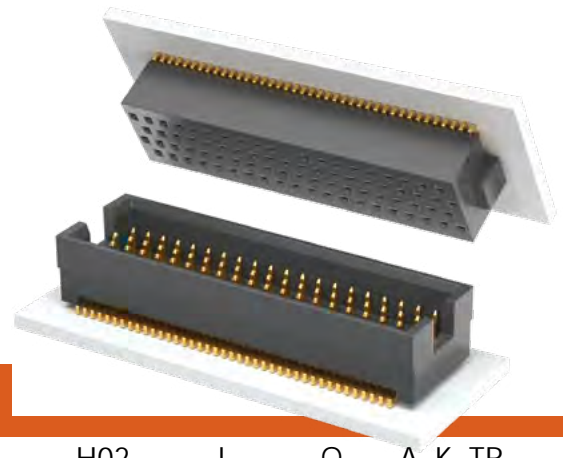


WORLDPO



1.27 mm PITCH • WTOLC/WSOLC SERIES

WTOLC

Mates:
WSOLC

WSOLC

Mates:
WTOLC

SPECIFICATIONS

Insulator Material:
Black Liquid Crystal Polymer
Contact Material:
Phosphor Bronze
Plating:
Au over 50 μ" (1.27 μm) Ni
Current Rating:
2.4 A per pin
(6 adjacent pins powered)
Operating Temp Range:
-55 °C to +125 °C
Insertion Depth (WSOLC):
1.68 mm to
3.61 mm with
0.38 mm wipe
Max Cycles (WSOLC):
100+

PROCESSING

Lead-Free Solderable:
Yes
SMT Lead Coplanarity:
0.10 mm max (05-35)
0.15 mm max (40-50)
stencil solution
may be available;

WTOLC	-	4X	05	H02	L	Q	A K TR
WTOLC	-	4X	NO.PINS PER ROW	LEAD STYLE	PLATING OPTION	Q	OTHER OPTION

05, 10, 15, 20, 25,
30, 35, 40, 45, 50
(Standard Sizes)

Specify
LEAD
STYLE
from
chart

F
= Gold flash
on contact,
Gold flash
on tail

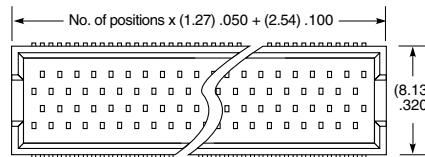
L
= 10 μ"
(0.25 μm)
Gold on
contact,
Gold flash
on tail

A
= Alignment Pin
(N/A with LC)

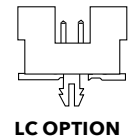
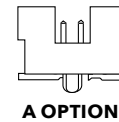
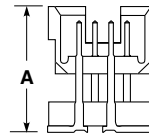
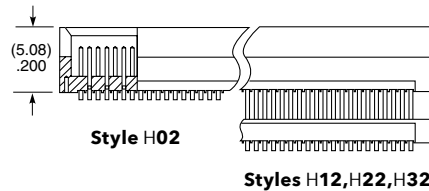
LC
= Locking Clip
(N/A with A)
(Manual
placement required)

K
= (9.00 mm) .354" DIA
Polyimide film
Pick & Place Pad

TR
= Tape & Reel



LEAD STYLE	A	MATED HEIGHT
H02	(5.59) .220	(6.35) .250
H12	(7.24) .285	(8.00) .315
H22	(9.25) .364	(10.00) .394
H32	(11.23) .442	(12.00) .472



WSOLC	-	4X	05	H02	L	Q	A K TR
WSOLC	-	4X	NO.PINS PER ROW	H02	PLATING OPTION	Q	OTHER OPTION

05, 10, 15, 20, 25,
30, 35, 40, 45, 50
(Standard Sizes)

F
= Gold flash
on contact,
Gold flash
on tail

L
= 10 μ"
(0.25 μm)
Gold on contact,
Gold flash
on tail

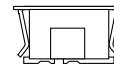
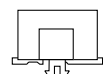
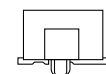
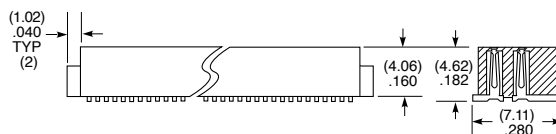
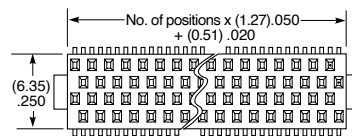
A
= Alignment Pin
(N/A with LC)

LC
= Locking Clip
(N/A with A)
(Manual
placement required)

K
= (7.00 mm) .276" DIA
Polyimide film
Pick & Place Pad

P
= Pick & Place Pad

TR
= Tape & Reel



A OPTION

LC OPTION

P OPTION

ALSO AVAILABLE

MOQ Required

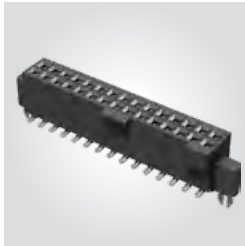
Other sizes
Other platings

Note:
Some lengths, styles and
options are non-standard,
non-returnable.

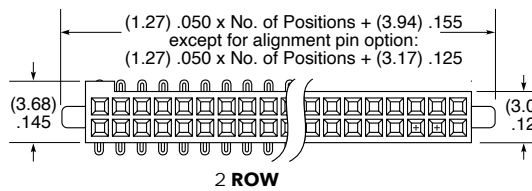
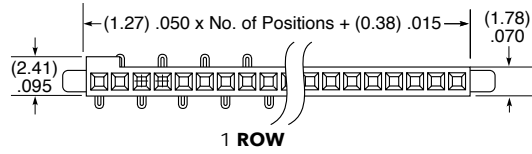
1.27 mm PITCH • SMT/THROUGH-HOLE SOCKET

WSFM - 2	05	HL2	L	D	A	
SERIES	2	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	ROW OPTION	OPTIONS
WSFM = Standard	1,2 Row	03, 04, 06, 08 (WSFM only)	(Surface Mount) H02 Contact (BeCu)	L = 10 μ"	D	Specify only A, LC or DS (Not available with DH, SH)
WSFML = Locking		05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Standard sizes)	(Through-hole) H01, H03 Contact (BeCu)	Gold on contact, Matte Tin on tail	SH = Single Horizontal (05 thru 30 positions only) (WSFM only) (Lead style H02 only)	Specify only K or P (Lead styles H02, HL2, HT2 only)
			HL2 = Low Insertion Force Contact (BeCu)	S = 30 μ"	LC = Locking Clip (Manual placement required)	K = Polyimide film Pick & Place Pad (Not available with DH, -SH)
			HT2 LITE Contact (Phosphor Bronze)	Gold on contact, Matte Tin on tail	DH = Double Horizontal (05 thru 30 positions only) (WSFM only) (Lead style H02 only)	P = Plastic Pick & Place Pad (Not available with DH, SH)
						DS = Dual Screw Down for (1.60 mm) .062" PCB (05 thru 40 positions only) (Lead styles H01, H02 & H03 only) (Requires D row option) (Not available with WSFML) (Mates with WTFM DS option) (Not available with A, LC, K, P, XR)

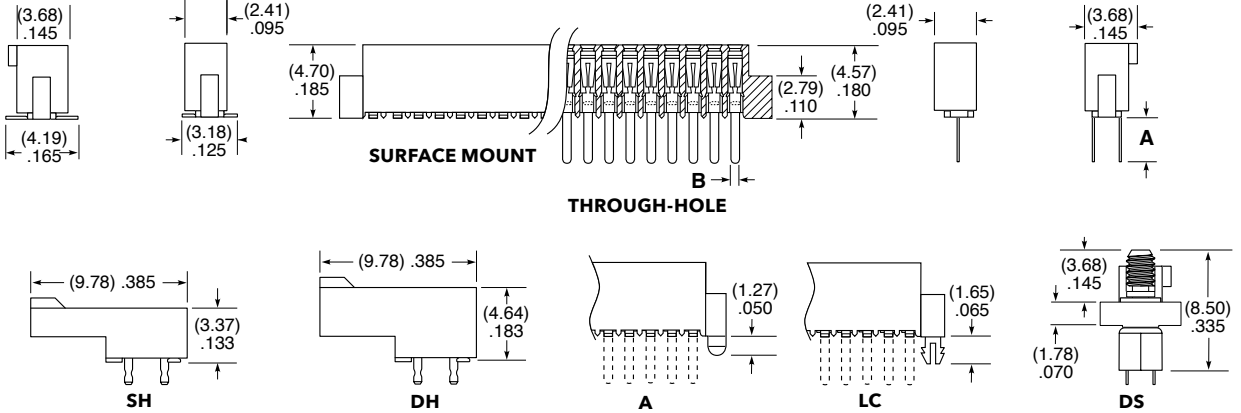
WSFM
Board Mates:
WTFM
Cable Mates:
WTFSD, WTFSS



WSFML
Board Mates:
WTFML
Cable Mates:
WTFSD



LEAD STYLE	A	B
H01, HL1, HT1	(3.05) .120	(0.51) .020
H03, HL3	(1.91) .075	(0.41) .016



1.27 mm • SMT/THROUGH-HOLE HEADER

WTFM - 2	10	H02	S	D	LC
SERIES	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	ROW OPTION	OPTIONS

WTFM
= Standard

WTFML
= Locking
(H01 & H02
lead style
only)

1,2
Row

**03, 04,
06, 08**
(WTFM H01 &
H02 only)

**05, 07,
10, 15, 20,
25, 30, 35,
40, 45, 50**
(Standard sizes)

Specify
**LEAD
STYLE**
from
chart

L
= 15 μ"
(0.38 μm)
Gold on post,
Matte Tin on tail

S
= 30 μ"
Gold on
contact,
Matte Tin
on tail

D

DH*
= Double
Horizontal
(WTFM lead
style H02 only
(05 thru 50
positions only)
(TR
option only
available)

Specify only RA,
RE1 or RE2

RA
= Right-angle
(Lead style
H01 only)

RE1
= Right-angle
Elevated for
(1.60 mm) .062" PCB
(Requires WTFM
lead style H01,
D row and WT)

RE2
= Right-angle
Elevated for
(2.36 mm) .093" PCB
(Requires WTFM lead
style H01, D row
and WT)

Specify only A,
LC, DS or WT
Not available with RA,
RE1 and RE2 unless
otherwise noted.

A
= Alignment Pin

LC
= Locking Clip
(Manual Placement
required)

DS
Dual
Screw Down
for (1.60 mm)
.062" PCB
(05, 07, 10, 15, 20,
25, 30, 35, 40
positions only)
(WTFM lead styles
H01 and H02 only)
(Requires D
row option)
(Mates with
WTFM DS option and
WSFSD/WSFSDT SS and
DS option only)
(Not available with A,
LC, WT, K, P, XR)

WT
= Weld Tab
(WTFM lead styles
H01 and H02 only)
(Required callout
for RE1 & RE2)
(Mates to WSFSS/WSFSD
SR and DR
option only)
(05, 07, 10, 15, 20,
25, 30, 35, 40, 45, 50
positions only)

SMT lead styles only
Specify only K or P

K
= Polyimide Film
Pick & Place Pad

P
= Plastic Pick
& Place Pad
(5 positions min.)
(Not available with
5 position with WT)

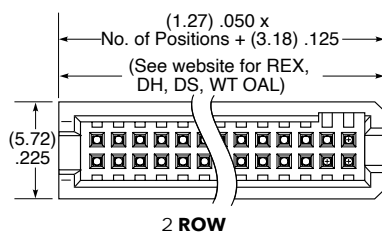
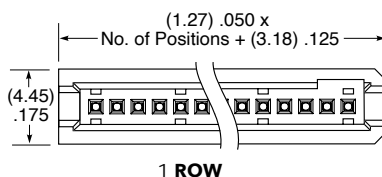
Specify TR
(Not available with DS)

TR
= Tape & Reel

WTFM
Board Mates:
WSFM, WSFMC
Cable Mates:
WSFSD, WSFSS

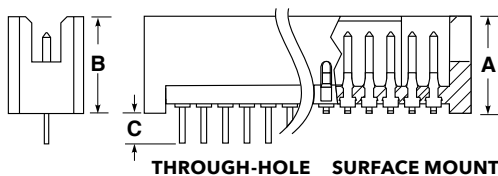


WTFML
Board Mates:
WSFML
Cable Mates:
WSFSD,
WTFSD (T end option)



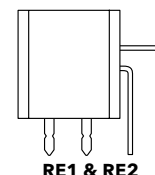
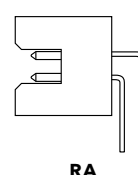
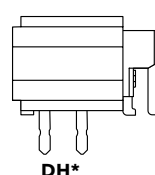
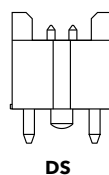
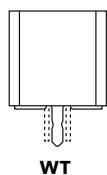
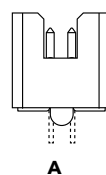
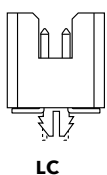
MATED HEIGHTS*		
LEAD STYLE (SMT)		MATED HEIGHT*
WTFM	WSFM	
H02	H02	(6.35) .250
H12		(8.13) .320
H22		(9.91) .390
H32		(11.81) .465
LEAD STYLE (T/H)		MATED HEIGHT*
WTFM	WSFM	
H01	H01	(5.97) .235
H03		(5.97) .235
H11		(7.75) .305
H13		(7.75) .305
H21		(9.53) .375
H23		(9.53) .375
H31		(11.43) .450

*Processing conditions will affect mated height.



LEAD STYLE (SMT)	A
H02	(5.72) .225
H12*	(7.49) .295
H22*	(9.27) .365
H32*	(11.18) .440

LEAD STYLE (T/H)	B	C
H01	(5.59) .220	(1.97) .078
H03*	(5.59) .220	(2.77) .109
H11*	(7.37) .290	(1.97) .078
H13*	(7.37) .290	(2.77) .109
H21*	(9.14) .360	(1.97) .078
H23*	(9.14) .360	(2.77) .109
H31*	(11.05) .435	(1.97) .078



REVISION AP

LEAD STYLE	BOARD SPACE WHEN MATED WITH WSOLC
02	6.35mm

WSOLC-4x XX H XX X
 FOUR ROWS
 NO. OF POSITIONS
 05 10 15 20 25
 30 35 40 45 50
 (PER ROW)
 LEAD STYLE
 02
 HIGH
 PACKAGING
 BLANK: TUBES (SEE NOTE 2)
 TR: TAPE & REEL
 PICK & PLACE OPTION
 P: PICK & PLACE PAD
 K: POLYIMIDE FILM PAD

ROW SPEC
 -Q: QUAD

PLATING SPEC
 F: 3µ" GOLD IN CONTACT AREA
 3µ" GOLD ON TAIL
 L: 10µ" GOLD IN CONTACT AREA
 3µ" GOLD ON TAIL
 S: 30µ" GOLD IN CONTACT AREA
 3µ" GOLD ON TAIL

OPTIONS
 LC: LOCKING CLIP (SEE FIG 2, SHT 2) (SEE NOTE 5)
 NOT AVAILABLE WITH A
 A: ALIGNMENT PINS (SEE FIG 3, SHT 2)
 (NOT AVAILABLE WITH LC)

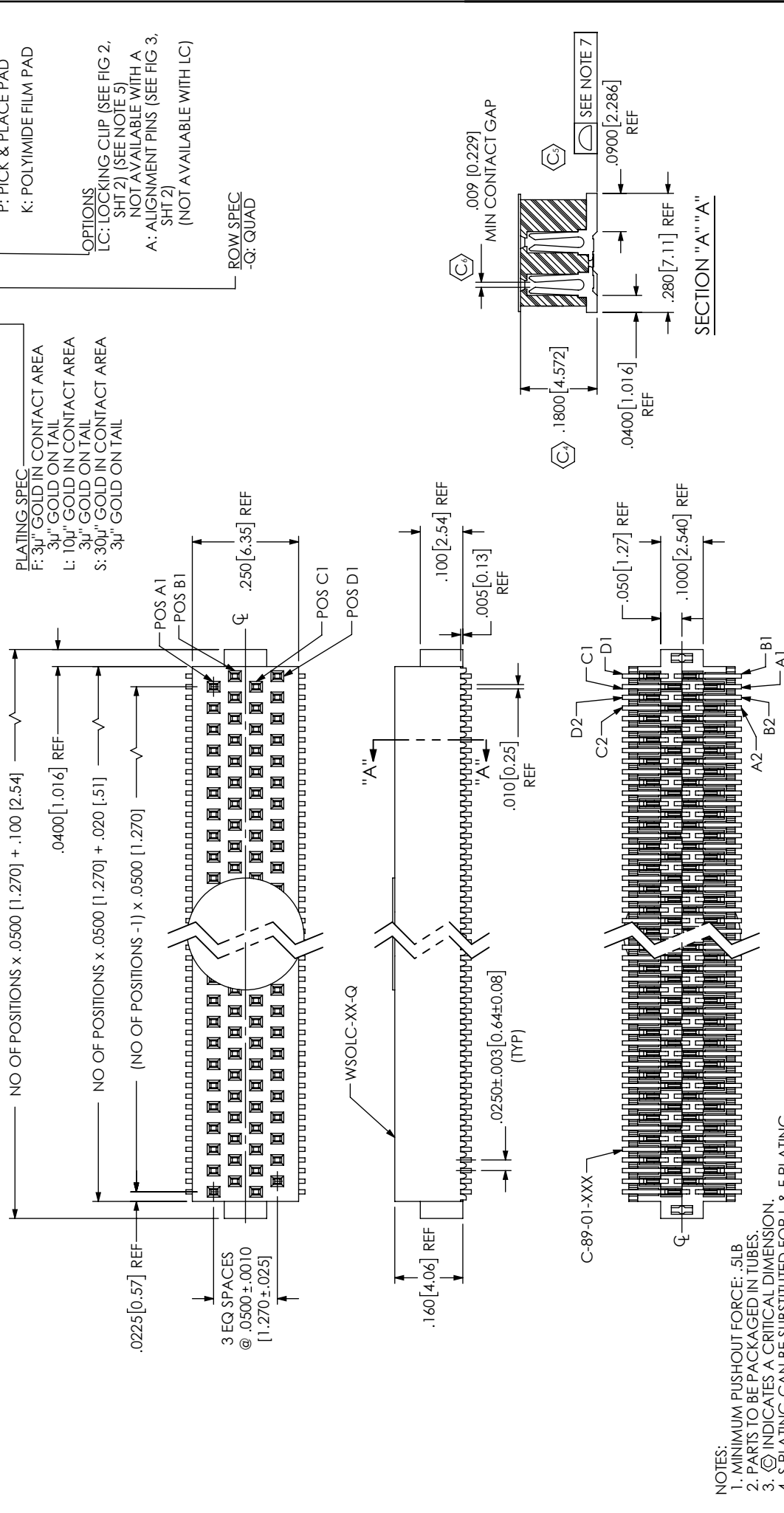


FIG 1

- NOTES:
- MINIMUM PUSHOUT FORCE: .5LB
 - PARTS TO BE PACKAGED IN TUBES.
 - ⊙ INDICATES A CRITICAL DIMENSION.
 - S PLATING CAN BE SUBSTITUTED FOR L & F PLATING.
 - DUE TO THE HIGH AMOUNT OF INSERTION FORCE NEEDED, WORLDPO RECOMMENDS MANUAL PLACEMENT FOR ALL ASSEMBLIES WITH THE LC OPTION.
 - INSULATOR MATERIAL: LCP, UL 94 VO
 - COPLANARITY:
 - 05 THRU 30 POSITION: .0040 [1.02]
 - 35 THRU 50 POSITION: .0060 [1.52]
 - ORDERS WILL BE PACKAGED ACCORDING TO THE WORLDPO PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON
 - ATTACH LABEL TO EACH REEL

WORLDPO
 Shenzhen WorldPO Precision Devices Co., LTD
 TEL: +86 01331 6922511 GU@WORLDPO.COM

DESCRIPTION:
 QUAD ROW STAGGERED SMT SOCKET ASM

DWG. NO.
 WSOLC-4x XX H XX X Q XX X XX

BY: TIM P. 2/10/2023 SHEET 1 OF 2

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
 TOLERANCES ARE:
 DECIMALS
 .XX: ±.01 [0.3]
 .XXX: ±.005 [0.13]
 .XXXX: ±.0020 [0.051]

ANGLES
 5°

DO NOT SCALE DRAWING
 SHEET SCALE: 3:1

MATERIAL: VECTRA E130. COLOR: BLACK
 CONTACT: PHOS BRONZE

MAX FLASH ALLOWED: .002 [0.05]
 MAX GATE VESTIGE: .002 [0.05]

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FIG 2
LC OPTION
(DIFFERENT AS SHOWN, OTHER WISE SAME AS FIG 1)

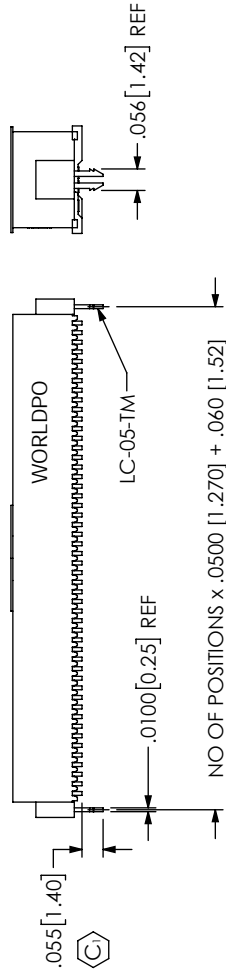
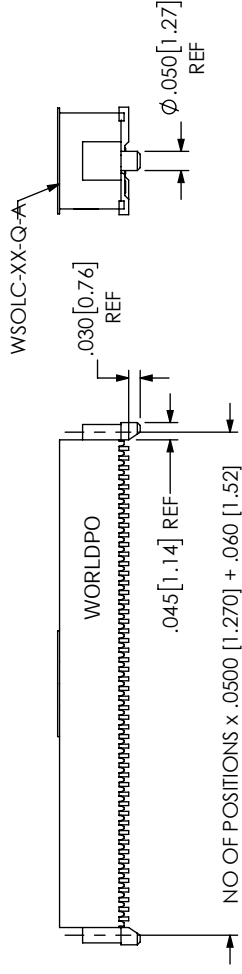
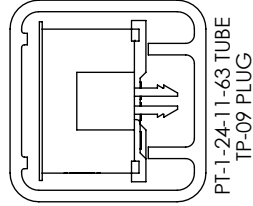


FIG 3
A MOLDED
(DIFFERENT AS SHOWN, OTHER WISE SAME AS FIG 1)

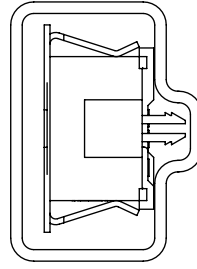


PACKAGING VIEW

TABLE	
NO OPTION, LC, A, K, K LC, P A	PT-1-24-11-63 TP-09
P, P LC, P A	PT-1-24-01-61 TP-03



PT-1-24-11-63 TUBE
TP-09 PLUG



PT-1-24-01-61 TUBE
TP-03 PLUG

FIG 4
-P OPTION
(DIFFERENT AS SHOWN, OTHER WISE SAME AS FIG 1)

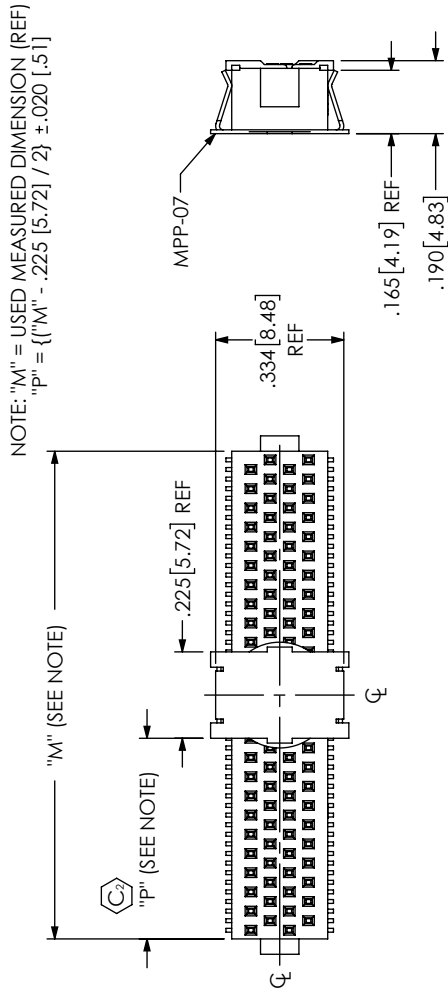
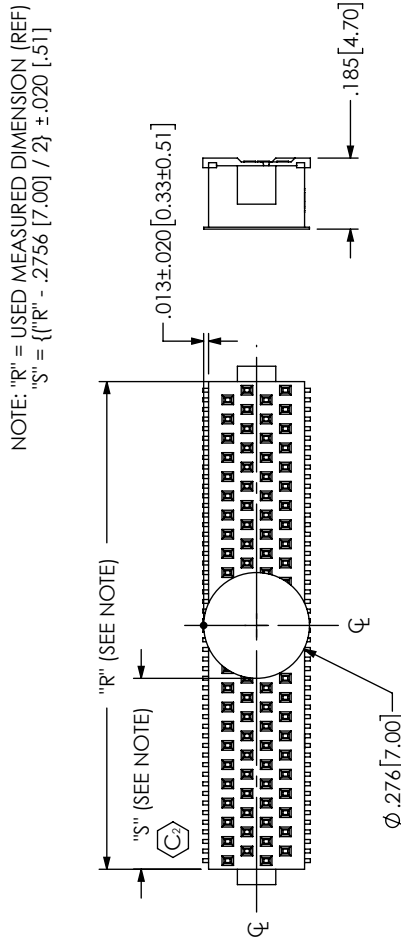


FIG 5
-P POLYIMIDE FILM PAD
(DIFFERENT AS SHOWN, OTHER WISE SAME AS FIG 1)



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DO NOT SCALE DRAWING
 SHEETS SCALE: 2:1

WORLDPO

Shenzhen WorldPO Precision Devices Co., LTD
 TEL: +86 01331 6922511 GU@WORLDPO.COM

DESCRIPTION:
 QUAD ROW STAGGERED SMT SOCKET ASM
 DWG. NO.
 WSOLC-4X XX H XX X Q XX X XX
 BY: TIM P. 2/10/2023 SHEET 2 OF 2

DO NOT SCALE FROM THIS PRINT

PACKAGING
BLANK: TUBE (SEE NOTE 2)
TR: TAPE & REEL
(SEE NOTE 7 & 8)

PICK & PLACE OPTION
P: PICK & PLACE PAD
(EXISTING CUSTOMER
SUPPORT ONLY)
K: POLYIMIDE FILM PAD
(USE K-DOT-.354-.469-.005)

OPTIONS
LC: LOCKING CLIP (SEE NOTE 5)
(USE LC-09-TM)
(NOT AVAILABLE WITH -A)
A: ALIGNMENT PIN
(USE WTOLC XX Q A FOR STYLE 02
AND WTOLCH XX Q A FOR STYLES
12, 22 & 32)
(NOT AVAILABLE WITH LC)

NO OF POSITIONS
05, 10, 15, 20, 25
30, 35, 40, 45, 50
(PER ROW)

LEAD STYLE
(SEE TABLE 1)
02, 12, 22, 32

PLATING SPEC
(VALUES GIVEN ARE
IN MICRO-INCHES)
S: SELECTIVE, 30 AU / 50 Ni MIN ON
CONTACT, 3 AU / 50 Ni MIN
ON TAIL
L: LIGHT SELECTIVE, 10 AU / 50 Ni MIN
ON CONTACT, 3 AU / 50 Ni MIN
ON TAIL
F: FLASH GOLD, 3 AU / 50 Ni MIN ON
CONTACT, 3 AU / 50 Ni MIN ON TAIL
STL: SELECTIVE, 30 AU / 100 Ni MIN ON
CONTACT, 100-250 Sn-Pb / 50 Ni MIN
ON TAIL (SEE NOTE 6)

ROW SPEC
Q: QUAD

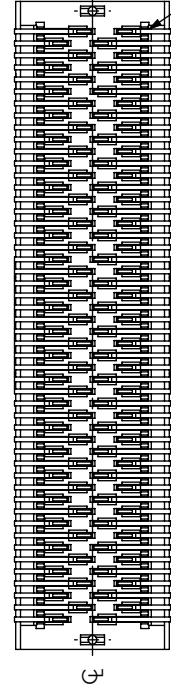
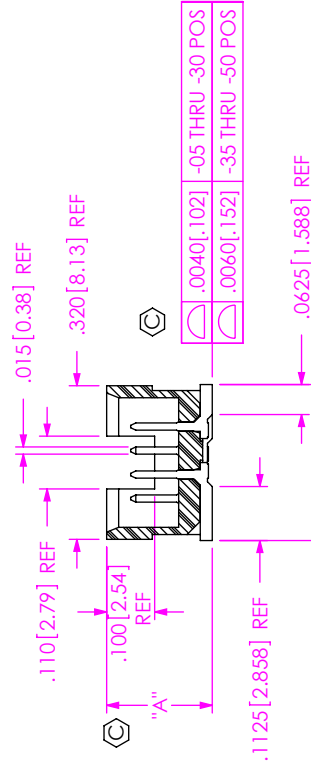
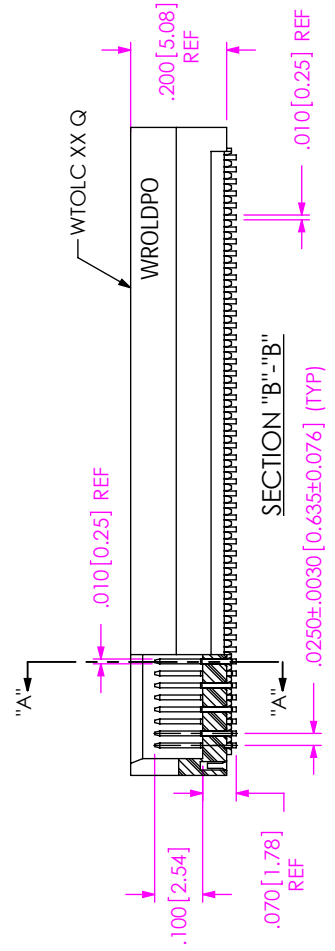
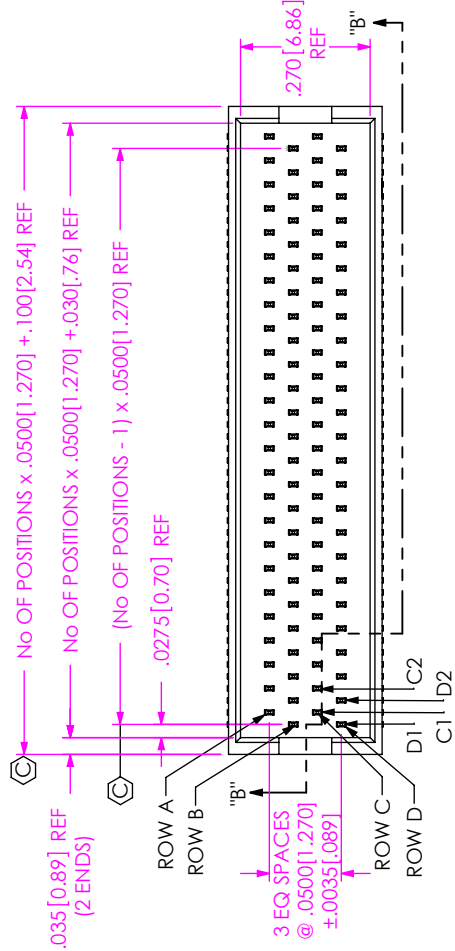


FIG 1

- NOTES:
1. MINIMUM PUSHOUT FORCE: 6 OZ.
 2. PARTS TO BE PACKAGED IN TUBES.
 3. S PLATING CAN BE SUBSTITUTED FOR L AND F PLATING STYLES.
 4. © REPRESENTS A CRITICAL DIMENSION.
 5. DUE TO THE HIGH AMOUNT OF INSERTION FORCE NEEDED, THE LC OPTION IS NOT COMPATIBLE WITH AUTO PLACEMENT. WORLDPO RECOMMENDS MANUAL PLACEMENT FOR ALL ASSEMBLIES WITH THE LC OPTION.
 6. FOR -STL PLATING:
USE SUB T 1M13.01 STL 2 FOR 02 LEAD STYLE.
USE T 1M14.0X STL 2 FOR 12, 22, 32 LEAD STYLES.
 7. ORDERS WILL BE PACKAGED ACCORDING TO THE WORLDPO PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON WWW.WORLDPO.COM.
 8. ATTACH LABEL TO EACH REEL.

TABLE 1

LEAD STYLE	"A"	USE TERMINAL	SEE FIG	BOARD SPACE WHEN MATED WITH SOLC
02	2200[5.588]	T-1M13-01-XXX-2	1	.2500[6.350]
12	2850[7.239]	T-1M14-02-XXX-2	2	.3150[8.000]
22	3637[9.238]	T-1M14-03-XXX-2	2	.3937[10.000]
32	4424[11.237]	T-1M14-04-XXX-2	2	.4724[12.000]

PROPRIETARY NOTE
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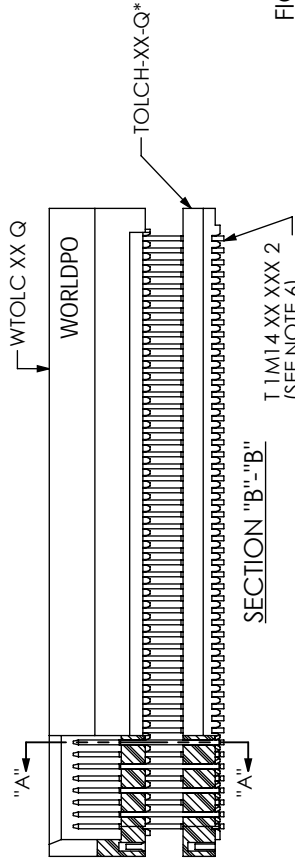
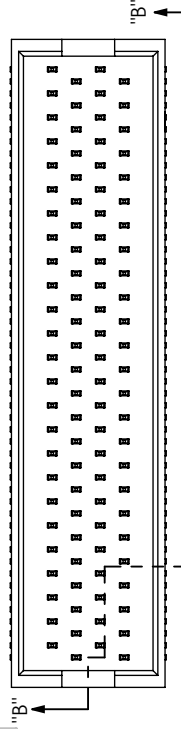
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
DECIMALS
XX: ±.01[0.3]
XXX: ±.005[0.13]
XXXX: ±.0020[0.051]

DO NOT SCALE DRAWING
SHEET SCALE: 1:0.4
MATERIAL:
BODY:
LCP UL 94 VO, COLOR: BLACK
TERMINAL:

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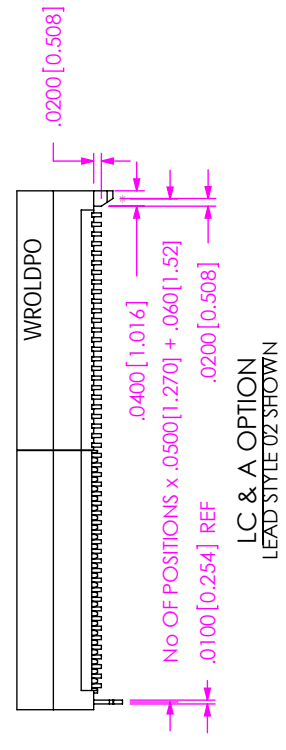
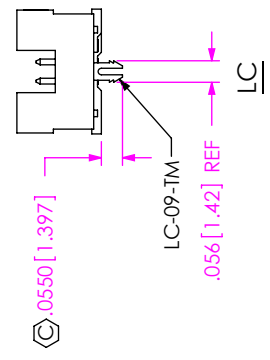
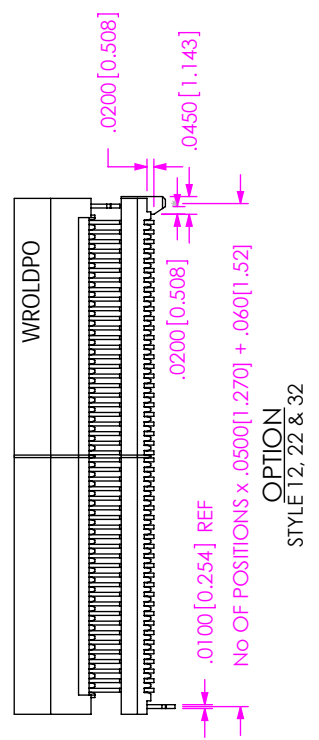
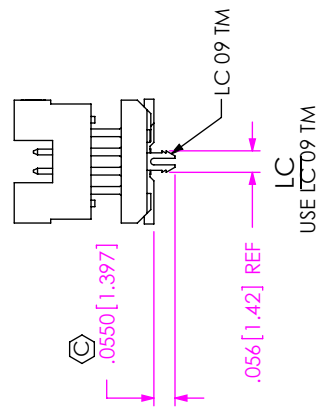
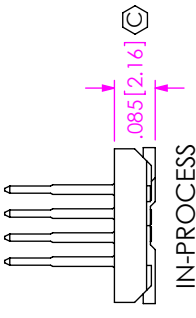
DESCRIPTION:
QUAD ROW STAGGERED SMT TERMINAL ASM
DWG. NO.
WTOLC- 4x XX H XX XXX Q XX XX XX
BY: D PURVIS 03/10/2023 SHEET 1 OF 3



SECTION "B"-"B"

FIG 2
*WTOLCH BODY IN THIS DESIGN REFLECTS
ALTERNATE STANDOFF DESIGN

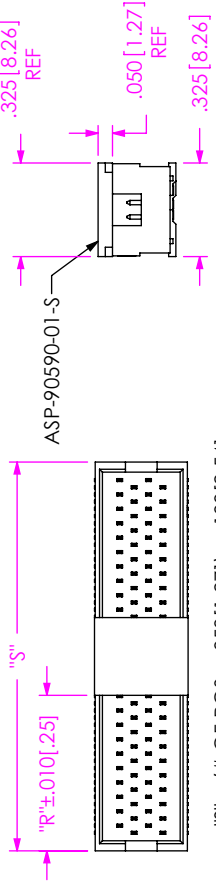
	.0040 [1.02]	05 THRU 30 POS
	.0060 [1.52]	35 THRU 50 POS



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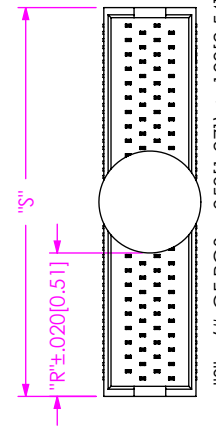
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DESCRIPTION:
QUAD ROW STAGGERED SMT TERMINAL ASM
DWG. NO.
WTOLC- 4x XX H XX XXX Q XX XX XX
BY: D PURVIS 03/10/2023 SHEET 2 OF 3



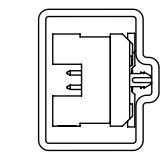
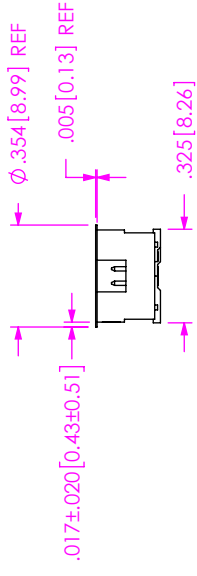
"S" = (# OF POS x .050 [1.27]) + .100 [2.54]
 "R" = (S/2) - .135 [3.429]

P & PL OPTION
 PICK & PLACE PAD

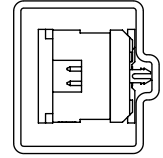


"S" = (# OF POS x .050 [1.27]) + .100 [2.54]
 "R" = (S/2) - (.354 [9.00]/2)

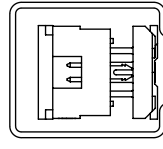
K OPTION
 PICK & PLACE PAD



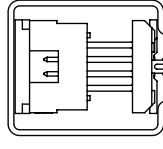
02/12 K/12 LC
 PT-1-24-01-70 TUBE
 TP-07 PLUG



12 LC P/22/22 K/22 LC P
 PT-1-24-01-70 TUBE
 TP-29 PLUG



22 P/22 A P
 PT-1-24-01-44 TUBE
 TP-13 PLUG



32
 PT-1-24-01-44 TUBE
 TP-13 PLUG

PACKAGING VIEWS

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SHEET SCALE: 1:0.4

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DESCRIPTION:
 QUAD ROW STAGGERED SMT TERMINAL ASM
 DWG. NO.
 WTOLC- 4x XX H XX XXX Q XX XX XX
 BY: D PURVIS 03/10/2023 SHEET 3 OF 3