

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Positive lock
- Fully isolated terminals
- Polarized housing assures proper mating
- Male and female terminals may be used in receptacle housing

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 TUV License No.: R75107  
 Mates With: [5219](#) header and [3191](#) plug  
 Use With: Standard .093" terminal  
 Designed In: Inches

### Electrical

Voltage: 600V  
 Current: 12.0A max.\*  
 Dielectric Withstanding Voltage: 5000V AC rms

### Mechanical

Contact Retention to Housing: 20 lb min.

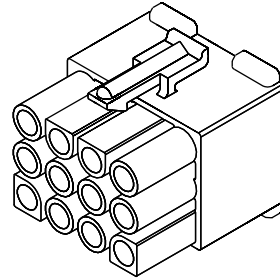
### Physical

Housing: Nylon, UL 94V-0 or 94V-2  
 Operating Temperature: -40 to +105°C

\* Depending on circuit size and wire gauge; please refer to product specifications

# molex® 6.71 mm (.264") Pitch .093" Pin and Socket Receptacle

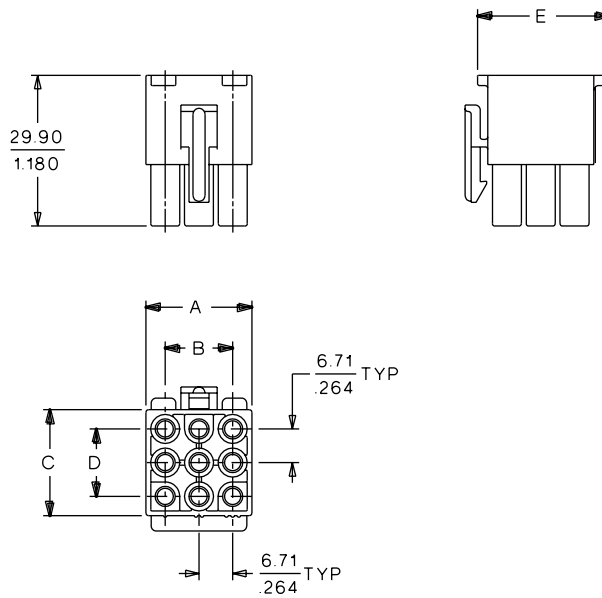
## 3191



Power Connectors

F

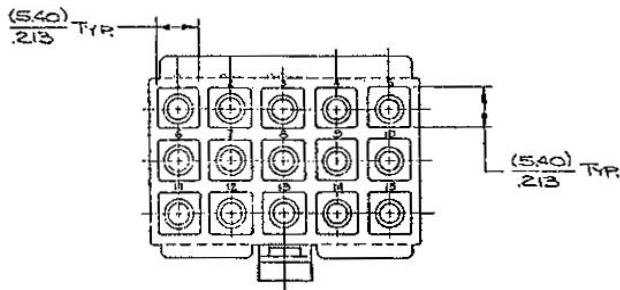
## CATALOG DRAWING (FOR REFERENCE ONLY)



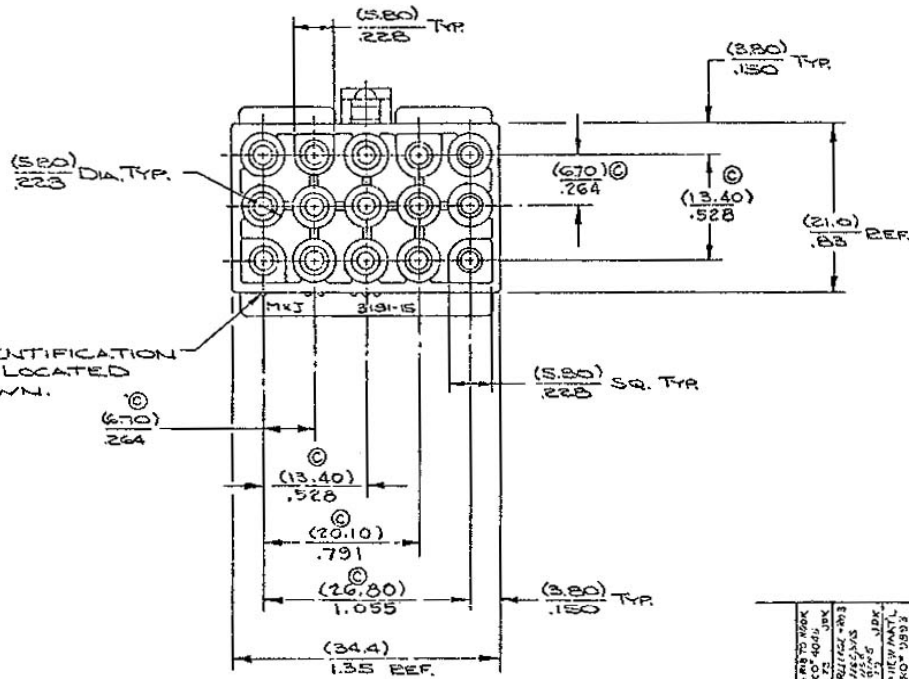
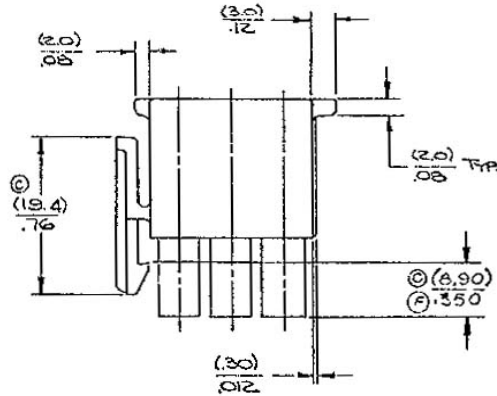
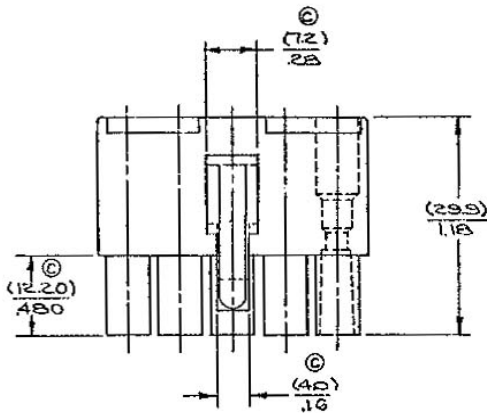
## ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Amperes per Circuit	Dimension				
	94V-2	94V-0		A	B	C	D	E
1	• 19-09-1019	• 19-09-1016	12	7.60 (.300)		7.60 (.300)		10.62 (.418)
2	• 19-09-1029	• 19-09-1026	12	14.30 (.560)	6.71 (.264)	7.60 (.300)		12.70 (.500)
3	• 19-09-1039	• 19-09-1036	11	21.00 (.830)	13.42 (.528)	7.60 (.300)		12.70 (.500)
4	• 19-09-1049	• 19-09-1046	9	27.70 (1.090)	20.13 (.792)	7.60 (.300)		12.70 (.500)
6	• 19-09-1069	• 19-09-1066	9	21.00 (.830)	13.42 (.528)	14.30 (.560)	6.71 (.264)	19.38 (.763)
9	• 19-09-1099	• 19-09-1096	9	21.00 (.830)	13.42 (.528)	21.00 (.830)	13.42 (.528)	26.20 (1.030)
12	• 19-09-1129	• 19-09-1126	9	27.70 (1.090)	20.13 (.792)	21.00 (.830)	13.42 (.528)	26.20 (1.030)
15	• 19-09-1159	• 19-09-1156	9	34.40 (1.350)	26.84 (1.056)	21.00 (.830)	13.42 (.528)	26.20 (1.030)

• US Standard Product, available through Molex franchised distributors



PART NO. 19-\*\*\*-115\*  
 SD-3191-15R1-201



SIDE IDENTIFICATION BEADS LOCATED AS SHOWN.

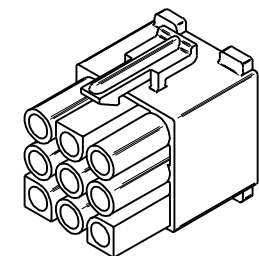
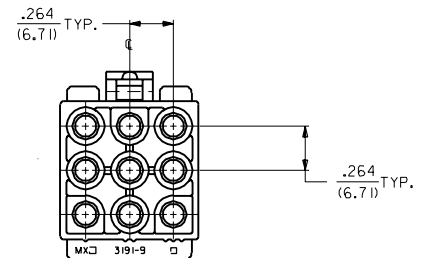
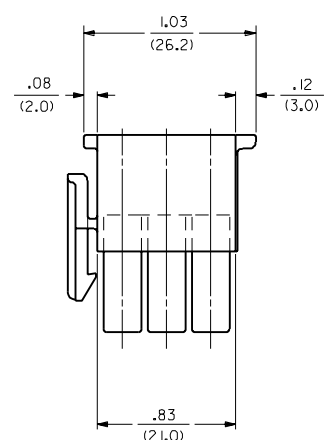
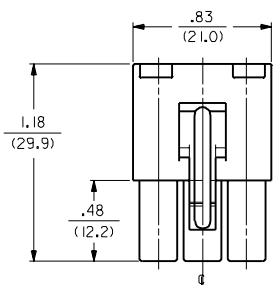
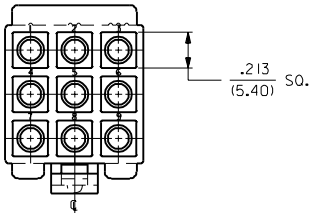
19-09-3151	SD-3191-15R1-201	ASAHI LEONA FR-200
NOT TOOLED	SD-3191-15R1-202	MOD. NYLON 6/6 94V-C DUPONT FF-3016
NOT TOOLED	SD-3191-15R1-200	MOD. NYLON 6/6 94V-O MONSANTO M340
19-09-1156	SD-3191-15R1-201	MOD. NYLON 6/6 94V-O WELLMID FR22-FW
19-09-1158	SD-3191-15R1	NYLON TYPE 6/6 94V-O
PART NO.	ENG. NO.	MATERIAL

REVISIONS		DATE		BY	
H	ADDERS TO MARK PER REC-4001				
G	1200 RELEASE-803				
F	1200 RELEASE-803				
E	1200 RELEASE-803				
D	1200 RELEASE-803				
C	1200 RELEASE-803				
B	1200 RELEASE-803				
A	1200 RELEASE-803				

DIMENSIONS SHOWN UNLESS SPECIFIED  
 UNLESS OTHERWISE SPECIFIED  
 3 PLACE DECIMALS  
 10 MIL TOLERANCE UNLESS OTHERWISE SPECIFIED  
 ALL DIMENSIONS ARE IN INCHES  
 UNLESS OTHERWISE SPECIFIED  
 DO NOT SCALE DRAWING

**HOUSING - RECEPTACLE, 15 CRT. (UNIVERSAL)**  
**MOLEX INCORPORATED**  
 1311 AL. 2027 U.S.A.  
 DATE 10/28/75  
 PART NO. 19-\*\*\*-115\*  
 ENG. NO. SD-3191-15R1-201  
 TITLE C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.



**RECEPTACLE**

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .005° TO		REVISIONS ONLY ON CAD SYSTEM	
INCH	METRIC	FILE NAME	DATE	DRAWING NO.	
3 PLACE ± .010	---	SEE CHART	8/ 2/ 89	SD-3191-9	
2 PLACE ± .014	± 0.25	FILE NAME	DATE	DRAWING NO.	
1 PLACE ---	± 0.35	531919X2	8/ 2/ 89	SD-3191-9	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DIV. CP		SIZE	
DRWG. BY: RAS		SCALE: 2 : 1		NO P.S. 1	
APP'D. BY: RAS		SCALE: 2 : 1		NO P.S. 1	
LTR.	REVISIONS	LTR.	REVISIONS		
		J	SEE SHT. 1		

PLUG	
PART NO.	ENG. NO.
19-09-2098	3191-9P
19-09-2099	3191-9P1
19-09-2097	3191-9P-201
19-09-2096	3191-9P1-201

RECEPTACLE	
PART NO.	ENG. NO.
19-09-1099	3191-9R1
19-09-1096	3191-9R1-201

**LEGEND:**  
 3191-9\*\*\*\*-\*

CIRCUIT SIZE →

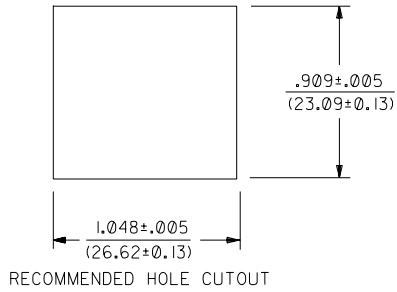
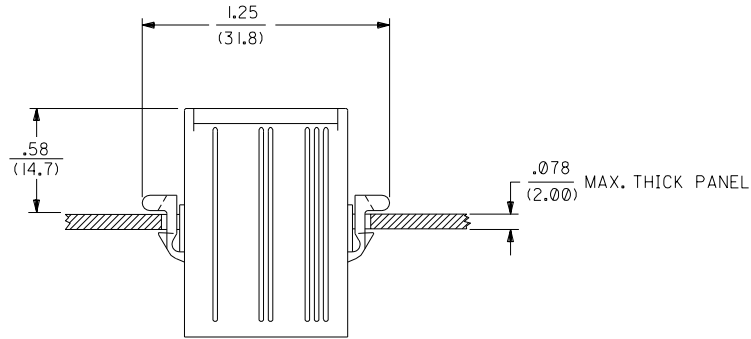
P = PLUG  
 R = RECEPTACLE

EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)  
 I = WITHOUT EARS

COLOR: BLANK = NATURAL COLOR

AM=AMBER BK=BLACK BU=BLUE  
 BN=BROWN GY=GRAY GN=GREEN  
 OR=ORANGE RD=RED YW=YELLOW  
 COLORS AVAILABLE ONLY IN 94V-2 MATERIAL

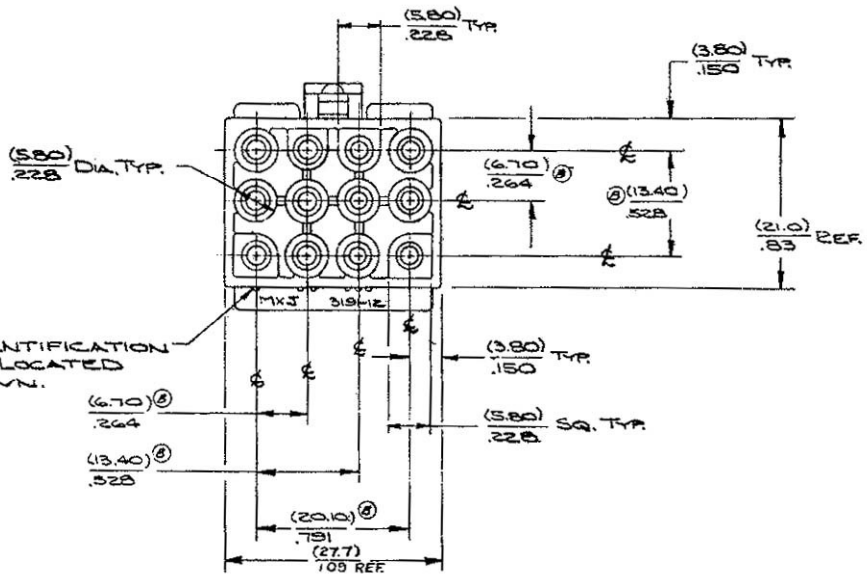
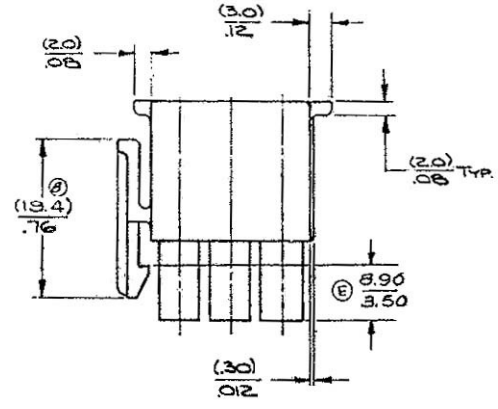
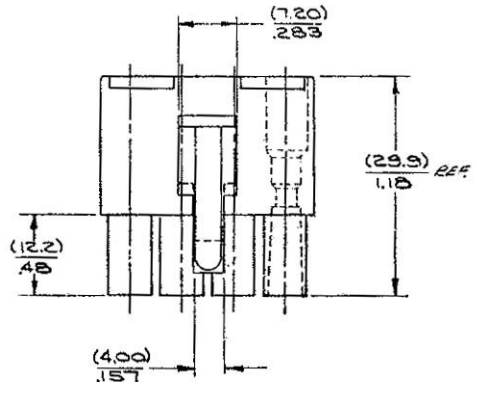
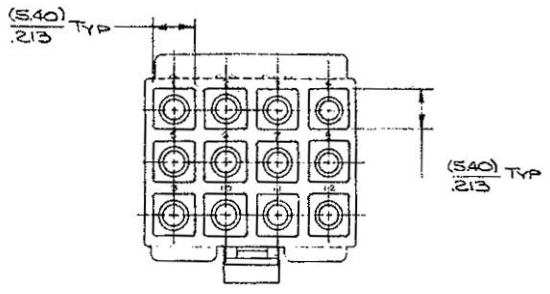
MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2  
 201=NYLON TYPE 6/6, 94V-0



**NOTES:**

I. THESE HOUSINGS FOR USE WITH MOLEX .093/(2.36) DIAMETER SERIES TERMINALS.

DIMENSIONS SHOWN (METRIC) INCH		▽ =		▼ =		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .04°   0		INCH		METRIC		TITLE	
5 PLACE	± .010	---	---	.093/(2.36) HOUSINGS PLUG AND RECEPTACLE 9 CKT., 264/(6.70) CTRS.			
2 PLACE	± .014	± 0.25	---	MOLEX INCORPORATED			
1 PLACE	---	± 0.35	---	SHEET NO. 3		DATE 8 / 2 / 89	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		PART NO.		DRWG. NO.		U.S.A.	
DRWG. BY: CEP		CHK'D. BY: RW		SEE CHART		SD-3191-9*	
APP'D. BY: RAS		SCALE: --:--		FILE NAME: 531919X3		DIV. CP	
LTR. REVISIONS		LTR. REVISIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		NO P.S. 1	



19-09-112\*  
SD-3191-12R1-D

NOTE:  
THIS HOUSING FOR USE WITH MOLEX  
(236)/.093 DIA. FEMALE TERMINALS.

PART NO.	ENG. NO.	MATERIAL
NOT TOOLED	SDX-3191-12R1-D	NYLON 6/6, 94U-2 COLOR NATURAL.
19-09-3121	SD-3191-12R1-203	ASAHI CEONA FR-200 (-D INDICATES DYED)
NOT TOOLED	SDX-3191-12R1-202	MOD. NYLON 6/6 94U-2 DUPONT FE-3016
NOT TOOLED	SDX-3191-12R1-200	MOD. NYLON 6/6, 94U-0, MOUSANTO M340
19-09-1126	SD-3191-12R1-201	MOD. NYLON 6/6, 94U-0, WELLAMID FE2-PA
19-09-1129	SD-3191-12R1	NYLON 6/6, 94U-2

REV.	DATE	DESCRIPTION
1	11/21/78	INITIAL DESIGN
2	12/1/78	REVISED TO ADD DIMENSIONS
3	12/1/78	REVISED TO ADD DIMENSIONS
4	12/1/78	REVISED TO ADD DIMENSIONS
5	12/1/78	REVISED TO ADD DIMENSIONS
6	12/1/78	REVISED TO ADD DIMENSIONS
7	12/1/78	REVISED TO ADD DIMENSIONS
8	12/1/78	REVISED TO ADD DIMENSIONS
9	12/1/78	REVISED TO ADD DIMENSIONS
10	12/1/78	REVISED TO ADD DIMENSIONS
11	12/1/78	REVISED TO ADD DIMENSIONS
12	12/1/78	REVISED TO ADD DIMENSIONS
13	12/1/78	REVISED TO ADD DIMENSIONS

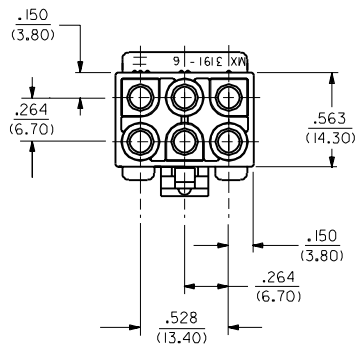
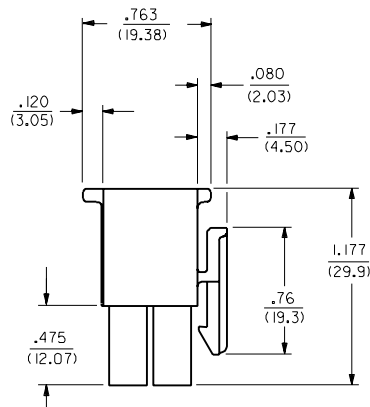
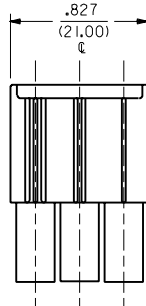
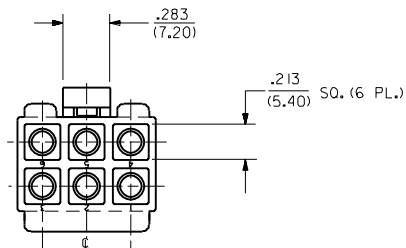
AGFO

MOLEX INCORPORATED

19-09-112\* SD-3191-12R1-D

DATE: 10/21/78

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.



RECEPTACLE

DIMENSIONS SHOWN METRIC (INCH)

UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .010

	INCH	METRIC
3 PLACE	± .010	---
2 PLACE	± .014	± 0.25
1 PLACE	---	± 0.36

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

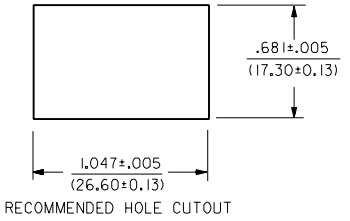
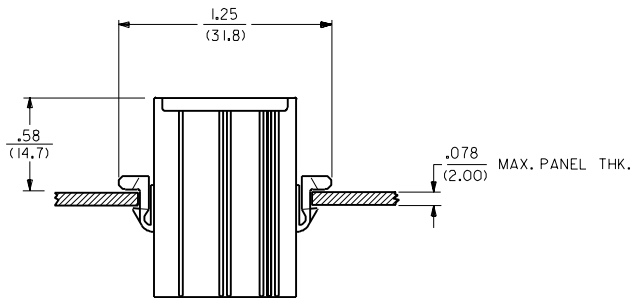
DRW: JJS CHKD: RW  
APP'D: RAS SCALE: 2:1

REVISIONS

TITLE		REVISE ONLY ON CAD SYSTEM	
.093/(2.36) HOUSING PLUG AND RECEPTACLE 6 CIRCUIT, .264/(6.70)CTRS			
PART NO. MOLEX INCORPORATED LITSEJLL		SHEET NO. 2	DATE 1/22/88
SEE SHEET 3		DRWG. NO. SD-3191-6	
FILE NAME S31916 X2	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		DIV. C

LTR.	REVISIONS	LTR.	REVISIONS
		J	SEE SHT 1

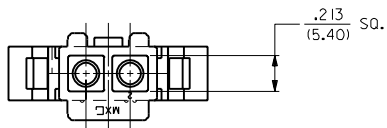
	13	12	11	10	9	8	7	6	3191	4	3	2	1		
	PLUG		RECEPTACLE											LEGEND:	
J	PART NO.	ENG. NO.	PART NO.	ENG. NO.										3191-6****-*	
	19-09-2068	3191-6P	19-09-1069	3191-6R1										CIRCUIT SIZE	
	19-09-2069	3191-6P1	19-09-1066	3191-6R1-201										P = PLUG	
	19-09-2067	3191-6P-201	19-09-6060	3191-6R IRD										R = RECEPTACLE	
	19-09-2066	3191-6P1-201	19-09-6069	3191-6R IBK										EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)	
I	19-09-7069	3191-6PRD												I = WITHOUT EARS	
	19-09-7068	3191-6PBK												COLOR: BLANK = NATURAL COLOR	
H														AM=AMBER BK=BLACK BU=BLUE	
														BN=BROWN GY=GRAY GN=GREEN	
G														OR=ORANGE RD=RED YW=YELLOW	
														COLORS AVAILABLE ONLY IN 94V-2 MATERIAL	
F														MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2	
														201=NYLON TYPE 6/6, 94V-0	
E															
D															
C															
B															
A															
	13	12	11	10	9	8	7	6	5	4	3	2	1		



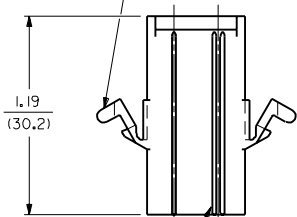
MOUNTING HOLE DETAIL

COLOR: BLANK = NATURAL COLOR  
 AM=AMBER BK=BLACK BU=BLUE  
 BN=BROWN GY=GRAY GN=GREEN  
 OR=ORANGE RD=RED YW=YELLOW  
 COLORS AVAILABLE ONLY IN 94V-2 MATERIAL  
 MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2  
 201=NYLON TYPE 6/6, 94V-0

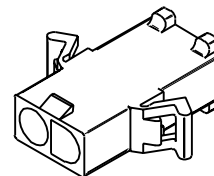
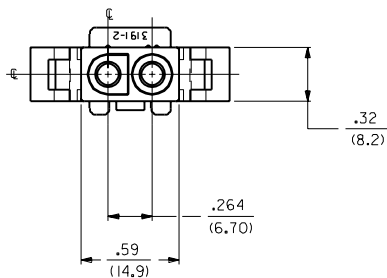
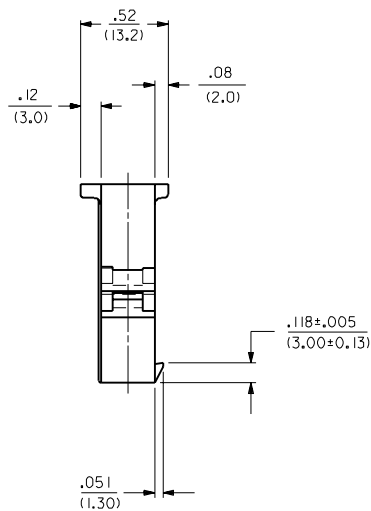
DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES ANGLES ARE ± DPM		REVISIONS		REVISIONS		DRAWING INFORMATION		MOLEX INCORPORATED		SHEET NO. 3		DATE 1/22/88	
3 PLACE	± .010	---		M	SEE SHEET 1			FILE NAME	SEE CHART	DRWG. NO.	SD-3191-6*	DIV. CP		SIZE IC	
2 PLACE	± .014	± 0.25		L	SEE SHT. 1			3191.6X3							
1 PLACE	---	± 0.36		K	SEE SHT. 1			DCN							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				J	SEE SHT. 1			BY: JUS RW							
								SCALE: --:--							
								APP'D. BY: RAS							



PREBENT MOUNTING EAR  
(WHEN SPECIFIED)



CIRCUIT NUMBER  
IDENTIFICATION RIBS



**PLUG**

3	E2	
2	D	
1	E4	
<input checked="" type="checkbox"/>	SH.	REV. LTR. REVISIONS

**REVISE ONLY ON CAD SYSTEM**

DIMENSIONS SHOWN METRIC (INCH)  $\nabla = 0$   $\blacktriangledown = 0$

UNLESS OTHERWISE SPECIFIED  
TOLERANCES: ANGULAR  $\pm .001$  TO

INCH	METRIC
3 PLACE $\pm .010$	---
2 PLACE $\pm .014$	$\pm 0.25$
1 PLACE ---	$\pm 0.35$

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

PART NO. **SEE CHART** DRWG. NO. **SD-3191-2\***

TITLE **.093/(2.36) HOUSING, PLUG AND RECEPTACLE, 2 CKT  $\pm .264/(6.70)$  CTRS.**

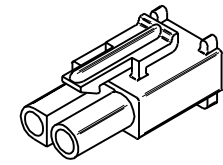
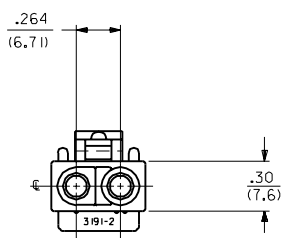
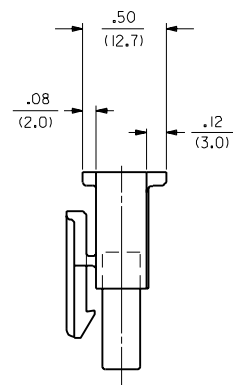
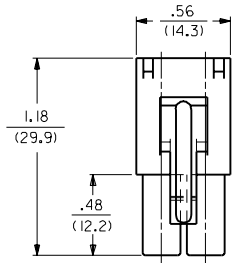
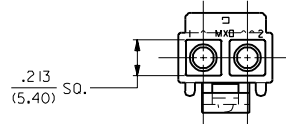
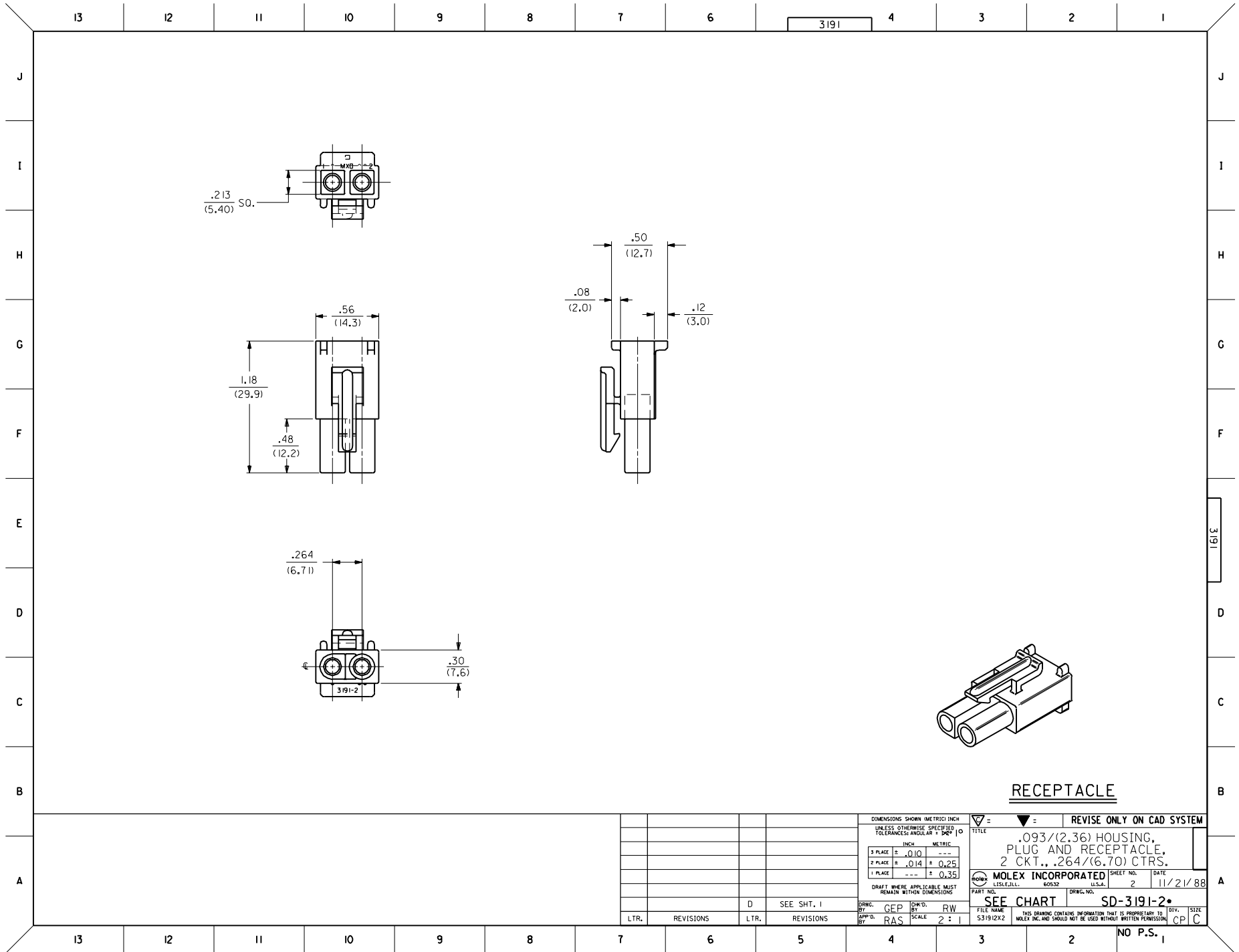
MOLEX INCORPORATED SHEET NO. DATE  
LITTLE ROCK, ARK. 60532 U.S.A. 1 of 3 11/21/88

DRWG. BY: CEP CHKD. BY: RW  
APP'D. BY: RAS SCALE: 2 : 1  
FILE NAME: S31912X1.DWG

NO P.S. 1

E4	REVISED UCR 98-0148 WANG 98-04-15
E3	ADD RAMP DIM'S ECN #U4 0293 3-1-94 RW
E2	X-REMOVE ECR U3 0001 C/C 12/30/92 RW
E1	REL. RED VERSIONS ECR U1 2167 C/C 1/24/92 RW
E	REV. MATL. CODE ECR # U90901 KBW 01-25-89 RW
D	REV. & REDRAWN ECR UB 1858 GEP 11-21-88 RW

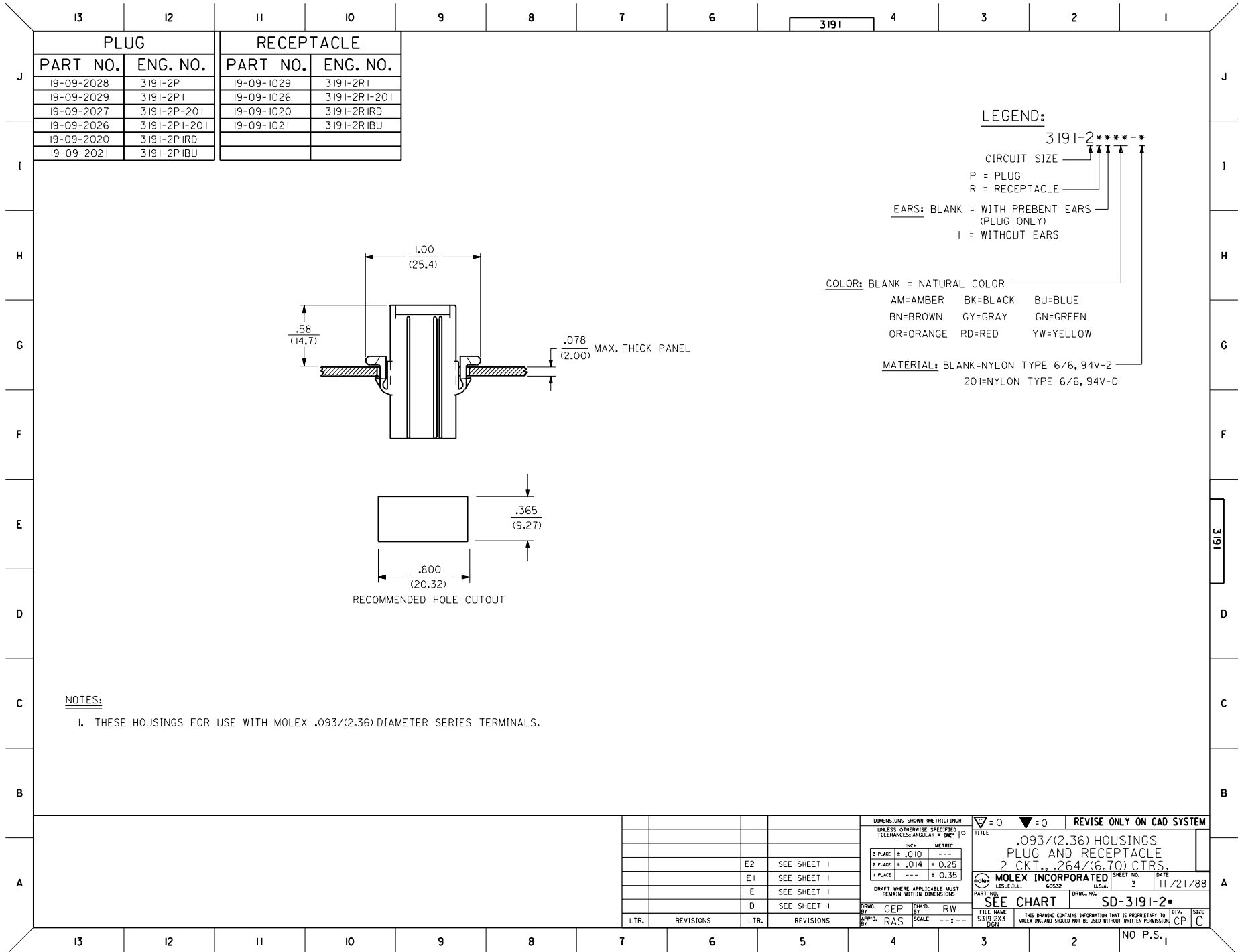




RECEPTACLE

DIMENSIONS SHOWN (METRIC) INCH		REVISIONS	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGLES ARE IN DEC		D	
		SEE SHT. 1	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRWG. BY: GEP	CHK'D. BY: RW		
APP'D. BY: RAS	SCALE: 2 : 1		

TITLE			
.093/(2,36) HOUSING, PLUG AND RECEPTACLE, 2 CKT., .264/(6,70) CTRS.			
MOLEX INCORPORATED		SHEET NO.	DATE
LITTLEFILL, 60532 U.S.A.		2	11/21/88
PART NO. SEE CHART		DRWG. NO. SD-3191-2	
FILE NAME: 531912X2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
		DIV.	SIZE
		CP	C



PLUG		RECEPTACLE	
PART NO.	ENG. NO.	PART NO.	ENG. NO.
19-09-2028	3191-2P	19-09-1029	3191-2R1
19-09-2029	3191-2P1	19-09-1026	3191-2R1-201
19-09-2027	3191-2P-201	19-09-1020	3191-2R IRD
19-09-2026	3191-2P1-201	19-09-1021	3191-2R IBU
19-09-2020	3191-2P IRD		
19-09-2021	3191-2P IBU		

**LEGEND:**

3191-2\*\*\*\*-\*

CIRCUIT SIZE

P = PLUG

R = RECEPTACLE

EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)

I = WITHOUT EARS

COLOR: BLANK = NATURAL COLOR

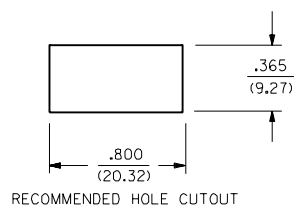
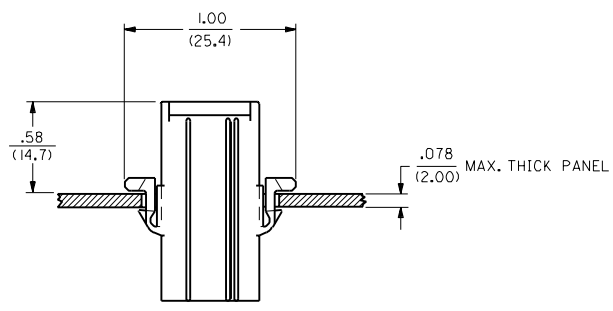
AM=AMBER BK=BLACK BU=BLUE

BN=BROWN GY=GRAY GN=GREEN

OR=ORANGE RD=RED YW=YELLOW

MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2

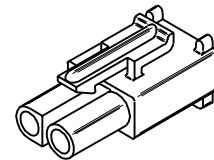
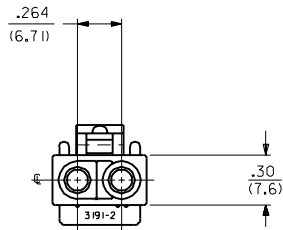
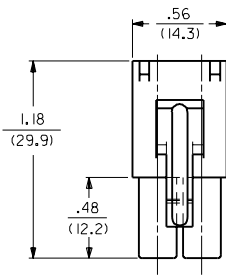
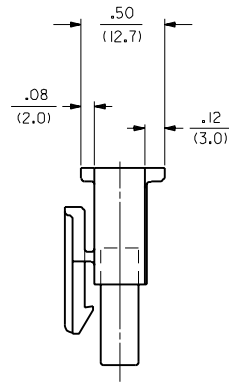
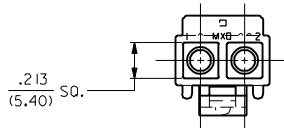
201=NYLON TYPE 6/6, 94V-0



**NOTES:**

1. THESE HOUSINGS FOR USE WITH MOLEX .093/(2.36) DIAMETER SERIES TERMINALS.

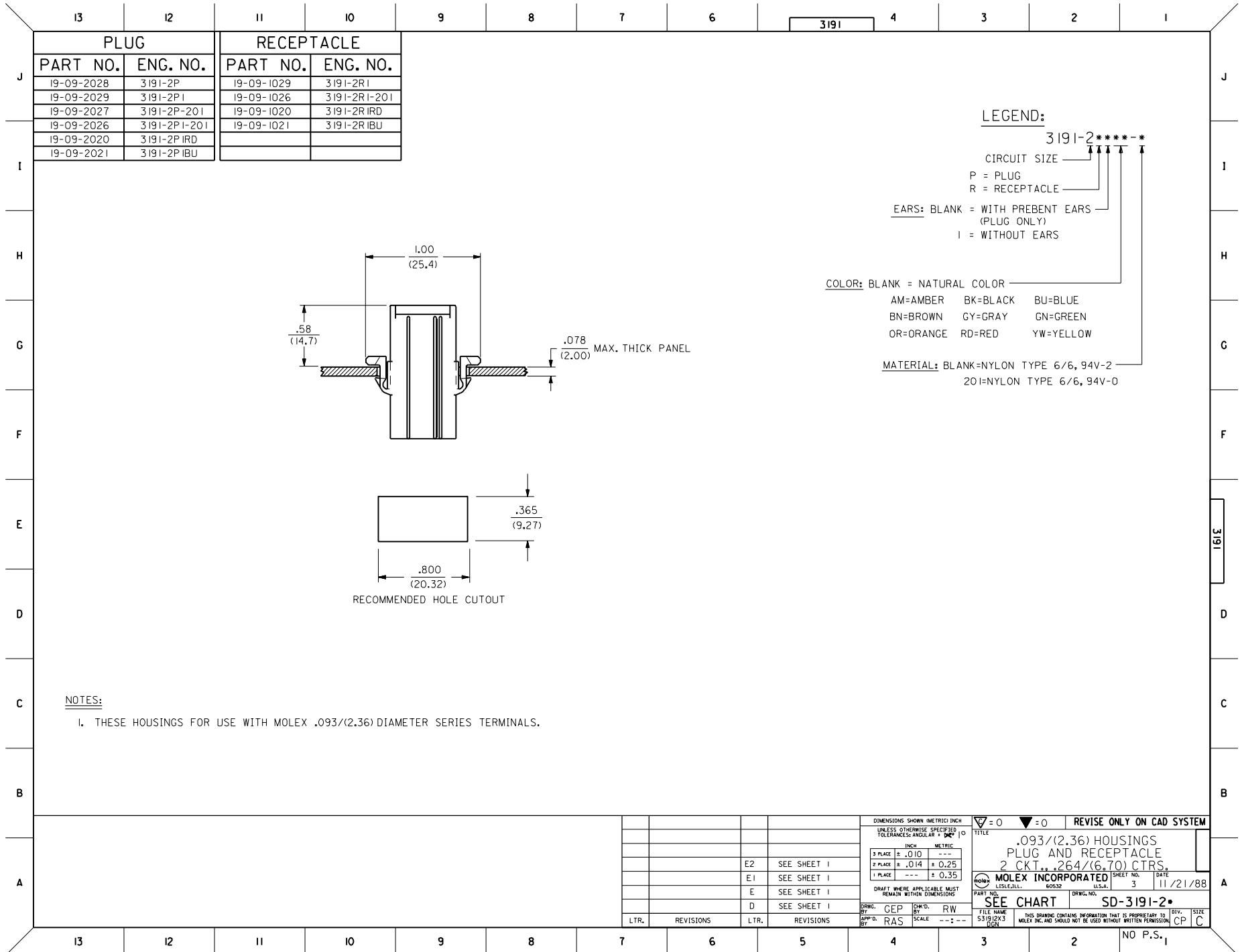
DIMENSIONS SHOWN (METRIC) INCH		▽=0 ▼=0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGLES .015°					
INCH		METRIC		TITLE	
3 PLACE	± .010	---	---	.093/(2.36) HOUSINGS	
2 PLACE	± .014	± 0.25	---	PLUG AND RECEPTACLE	
1 PLACE	---	± 0.35	---	2 CKT., .264/(6.70) CTRS.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
DRWG. BY: CEP	CHK'D. BY: RW	FILE NAME: 531912X3	SCALE: --:--	PART NO. SEE CHART	DRWG. NO. SD-3191-2*
APP'D. BY: RAS	SCALE: --:--	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		SHEET NO. 3	DATE 11/21/88
LTR. REVISIONS	LTR. REVISIONS	NO P.S. 1		DIV. SIZE CP C	



RECEPTACLE

DIMENSIONS SHOWN METRIC (INCH)		REVISIONS	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .005° TO		D	SEE SHT. 1
INCH	METRIC	LTR.	REVISIONS
3 PLACE ± .010	---		
2 PLACE ± .014	± 0.25		
1 PLACE ---	± 0.35		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRWG. BY: RAS	CHKD. BY: RW		
APP'D. BY: RAS	SCALE: 2:1		

TITLE		REVISIONS	
.093/(2.36) HOUSING, PLUG AND RECEPTACLE, 2 CKT., .264/(6.70) CTRS.		D	SEE SHT. 1
MOLEX INCORPORATED		LTR.	REVISIONS
LITLLEJ.L.L.	60532		
U.S.A.			
SHEET NO. 2	DATE 11/21/88		
PART NO. SD-3191-2*			
DRWG. NO.			
SEE CHART			
FILE NAME: S31912X2	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		DIV. CP



PLUG		RECEPTACLE	
PART NO.	ENG. NO.	PART NO.	ENG. NO.
19-09-2028	3191-2P	19-09-1029	3191-2R1
19-09-2029	3191-2P1	19-09-1026	3191-2R1-201
19-09-2027	3191-2P-201	19-09-1020	3191-2R IRD
19-09-2026	3191-2P1-201	19-09-1021	3191-2R IBU
19-09-2020	3191-2P IRD		
19-09-2021	3191-2P IBU		

**LEGEND:**

3191-2\*\*\*\*-\*

CIRCUIT SIZE

P = PLUG

R = RECEPTACLE

EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)

I = WITHOUT EARS

**COLOR:** BLANK = NATURAL COLOR

AM=AMBER BK=BLACK BU=BLUE

BN=BROWN GY=GRAY GN=GREEN

OR=ORANGE RD=RED YW=YELLOW

**MATERIAL:** BLANK=NYLON TYPE 6/6, 94V-2

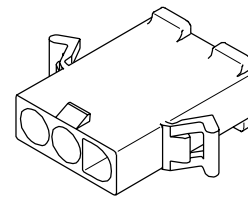
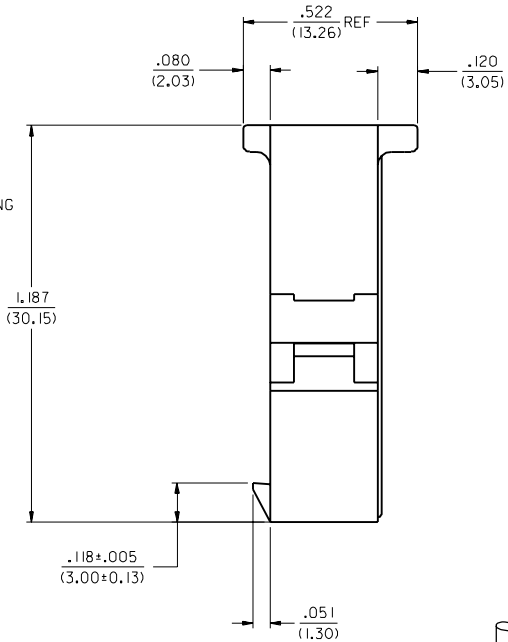
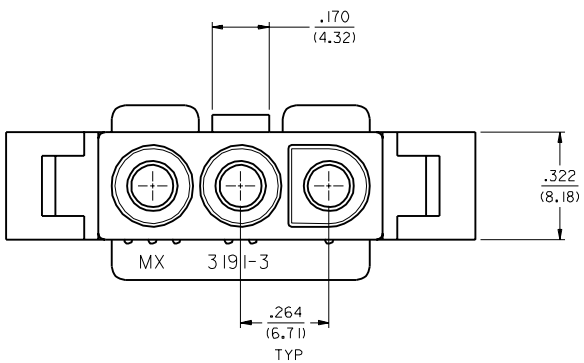
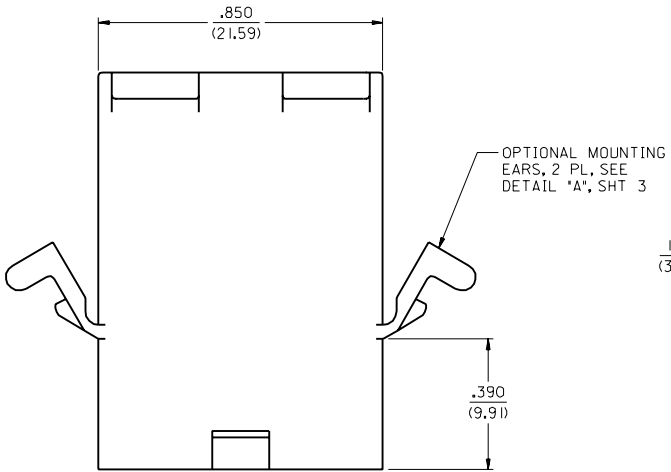
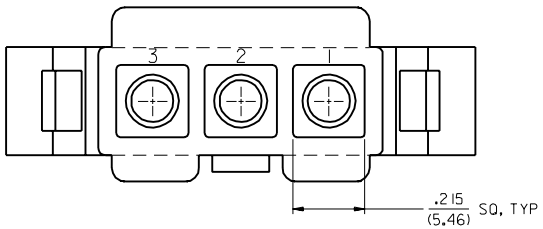
201=NYLON TYPE 6/6, 94V-0

**NOTES:**

1. THESE HOUSINGS FOR USE WITH MOLEX .093/(2.36) DIAMETER SERIES TERMINALS.

DIMENSIONS SHOWN (METRIC) INCH		▽=0 ▼=0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGLES .015		TITLE		.093/(2.36) HOUSINGS PLUG AND RECEPTACLE 2 CKT., .264/(6.70) CTRS.	
INCH METRIC		MOLEX INCORPORATED		SHEET NO. 3 DATE 11/21/88	
3 PLACE ± .010 ---		LITTLE, JILL. 60532 U.S.A.		PART NO. SD-3191-2*	
2 PLACE ± .014 ± 0.25		SEE CHART		DRAWING NO.	
1 PLACE --- ± 0.35		FILE NAME: 531912X3.DGN		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SCALE: ---:---		DIV. SIZE CP C	
DRWG. BY: CEP	CHK'D. BY: RW	NO P.S. 1			
APP'D. BY: RAS	SCALE: ---:---				

LTR.	REVISIONS	LTR.	REVISIONS
E2	SEE SHEET I		
E1	SEE SHEET I		
E	SEE SHEET I		
D	SEE SHEET I		



PLUG

3	J5			
2	J5	J5	REDRAWN ON CAD	
1	J5		ECR U6 0734	RW
			CK 1/8/96	

MMB, SH, REV, LTR, REVISIONS

DIMENSIONS SHOWN METRIC (INCH) UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°

INCH	METRIC
3 PLACE ± .010	---
2 PLACE ± .015	± 0.25
1 PLACE ---	± 0.38

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

FILE NAME: SD-3191-3  
 DRAWING NO.: 60532  
 SHEET NO.: 1 of 3  
 DATE: 1/ 8/96

**MOLEX INCORPORATED**  
 LISLE, ILL. U.S.A.

**SEE CHART**

DRWG. BY: RAS  
 INSP. BY: RAS  
 FILE NO.: S31913X1  
 DGN

DRWG. NO.: SD-3191-3  
 DATE: 1/ 8/96

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

NO P.S.

13 12 11 10 9 8 7 6 3191 4 3 2 1

PLUG		RECEPTACLE	
PART NO.	ENG. NO.	PART NO.	ENG. NO.
19-09-2038	3191-3P	19-09-1039	3191-3R1
19-09-2039	3191-3P1	19-09-1036	3191-3R1-201
19-09-2037	3191-3P-201	19-09-3030	3191-3R1RD
19-09-2036	3191-3P1-201		
19-09-1038	3191-3P1RD		
19-09-3032	3191-3PRD		
19-09-3033	3191-3PBU		

**LEGEND**

3191-3\*\*\*\*\*

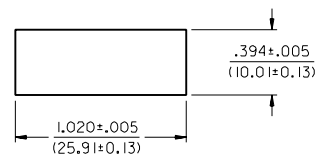
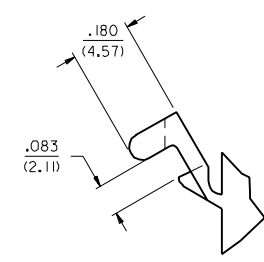
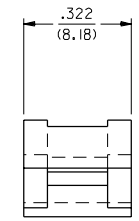
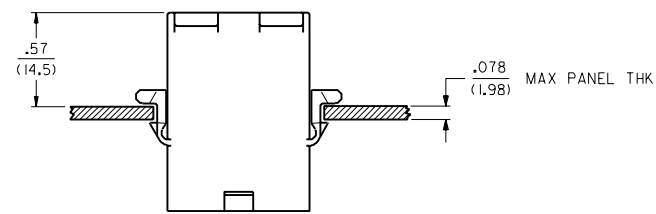
CIRCUIT SIZE

P = PLUG  
R = RECEPTACLE

EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)  
I = WITHOUT EARS

COLOR: BLANK = NATURAL COLOR  
AM=AMBER BK=BLACK BU=BLUE  
BN=BROWN GY=GRAY GN=GREEN  
OR=ORANGE RD=RED YW=YELLOW  
COLORS AVAILABLE ONLY IN 94V-2 MATERIAL

MATERIAL: BLANK=NYLON TYPE 6/6,94V-2  
201=NYLON TYPE 6/6, 94V-0



RECOMMENDED HOLE CUTOUT

DETAIL "A"  
PREBENT MOUNTING EAR  
(SCALE 4:1)

DIMENSIONS SHOWN (METRIC) INCH		▽=0 ▼=0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°					
INCH		METRIC		TITLE	
3 PLACE	± .010	---	---	.093/(2.36) HOUSINGS	
2 PLACE	± .015	± 0.25	---	PLUG AND RECEPTACLE	
1 PLACE	---	± 0.38	---	3 CKT. ±.264/(6.71) CTRS.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
PART NO.		SHEET NO.		DATE	
3191-3		3		1/8/96	
DRAWN BY: GIC		CHK'D BY: RW		PART NO. SD-3191-3*	
APP'D BY: RAS		SCALE: --:--		FILE NAME: 531913X3.DGN	
LTR. REVISIONS		LTR. REVISIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
J5 SEE SHEET 1				DIV. SIZE CP IC	

13 12 11 10 9 8 7 6 5 4 3 2 NO P.S. 1

13 12 11 10 9 8 7 6 3191 4 3 2 1

PLUG	
PART NO.	ENG. NO.
19-09-2038	3191-3P
19-09-2039	3191-3PI
19-09-2037	3191-3P-201
19-09-2036	3191-3PI-201
19-09-1038	3191-3PIRD
19-09-3032	3191-3PRD
19-09-3033	3191-3PBU

RECEPTACLE	
PART NO.	ENG. NO.
19-09-1039	3191-3RI
19-09-1036	3191-3RI-201
19-09-3030	3191-3RIRD

**LEGEND**

3191-3\*\*\*\*-\*

CIRCUIT SIZE

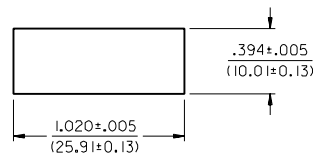
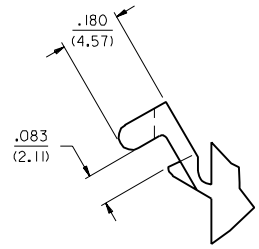
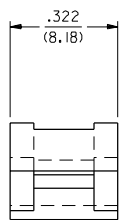
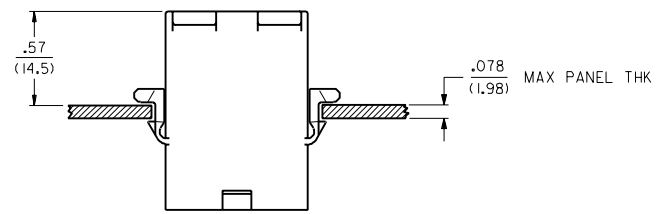
P = PLUG  
R = RECEPTACLE

EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)  
I = WITHOUT EARS

COLOR: BLANK = NATURAL COLOR

AM=AMBER BK=BLACK BU=BLUE  
BN=BROWN GY=GRAY GN=GREEN  
OR=ORANGE RD=RED YW=YELLOW  
COLORS AVAILABLE ONLY IN 94V-2 MATERIAL

MATERIAL: BLANK=NYLON TYPE 6/6,94V-2  
201=NYLON TYPE 6/6, 94V-0



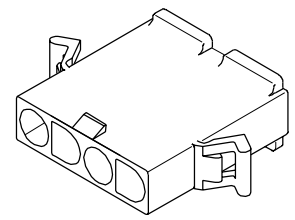
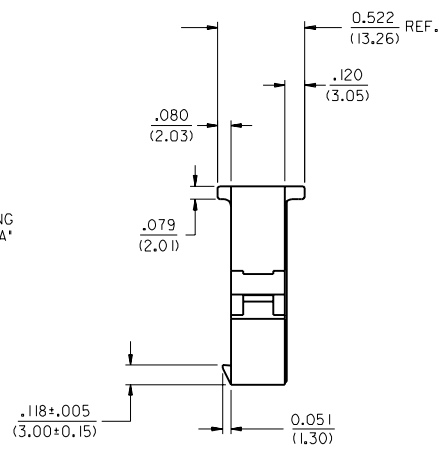
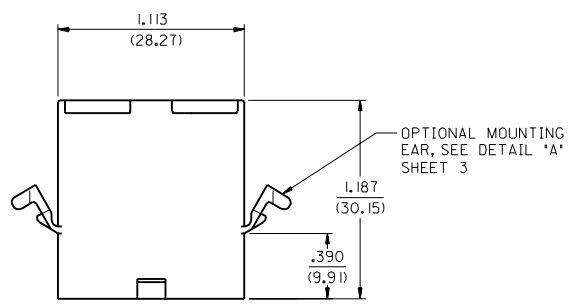
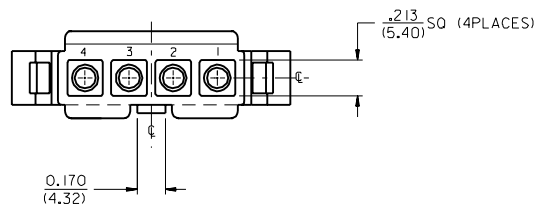
RECOMMENDED HOLE CUTOUT

DETAIL "A"  
PREBENT MOUNTING EAR  
(SCALE 4:1)

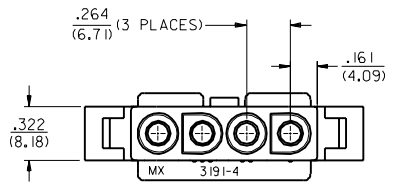
DIMENSIONS SHOWN (METRIC) INCH		▽ = 0	▼ = 0	REVISE ONLY ON CAD SYSTEM
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		TITLE		
		.093/(2.36) HOUSINGS PLUG AND RECEPTACLE 3 CKT ±.264/(6.71) CTRS.		
		MOLEX INCORPORATED SHEET NO. 3 DATE 1/8/96		
		LITSEJLL 60532 U.S.A.		
		PART NO. SD-3191-3*		
		SEE CHART		
		FILE NAME 531913X3.DWG		
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		
		DIV. CP		
		SIZE C		

DRW. BY RAS	CHKD. BY RW	APP'D. BY RAS	SCALE --:--
LTR.	REVISIONS	LTR.	REVISIONS
	J5 SEE SHEET 1		

13 12 11 10 9 8 7 6 5 4 3 2 NO P.S. 1



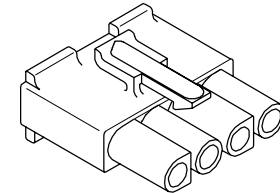
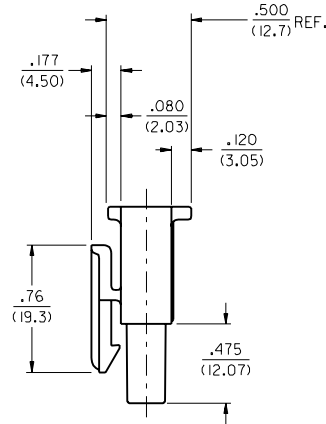
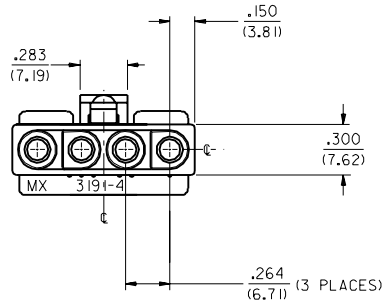
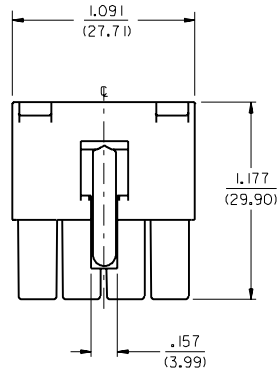
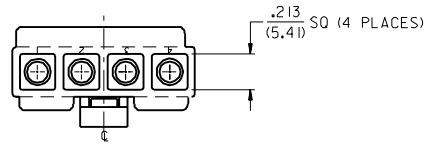
# PLUG HOUSING



3	J3
2	J3
1	J3

REDRAWN ON CAD EC NO. UCR1998-0254 DRWN: J. WANG 0006007 CHK: WIRKUS 0006007 APPR: R. EDGLEY 0006007	QUALITY SYMBOLS MAJOR $\blacktriangledown$ = 0 CRITICAL $\nabla$ = 0	GENERAL TOLERANCES: (UNLESS SPECIFIED)		SCALE 2 : 1	DESIGN UNITS <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH	THIRD ANGLE PROJECTION <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	DIMENSIONS: <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	SHT REV	REVISE ON CAD ONLY
		4 PLACES ±0.--- ±.---	3 PLACES ±0.--- ±.010	2 PLACES ±0.25 ±.015	1 PLACE ±0.38 ±.---				
DRAWN BY & DATE J. WANG 98/08/24		CHECKED BY & DATE WIRKUS 98/08/24		APPROVED BY & DATE R. EDGLEY 98/08/24		TITLE: <b>.093/(2.36) HOUSINGS PLUG AND RECEPTACLE 4-CKTS, .264/(6.70) CTRS</b>		MATERIAL NO. DRAWING NO. SHEET NO. SEE SHT. 3 SD -3191 -4* 1 OF 3	
CAD FILENAME S3191401.DGN		MATERIAL NO. SEE SHT. 3		DRAWING NO. SD -3191 -4*		SHEET NO. 1 OF 3		SIZE C	





RECEPTACLE

EC NO. LCR1998-0254 DRWG. J.WANG 000607 CHK. B.WIRKUS 000607 APPR. R. EDGLEY 000607	QUALITY SYMBOLS MAJOR $\nabla=0$ CRITICAL $\nabla C=0$	GENERAL TOLERANCES: (UNLESS SPECIFIED)		SCALE 2 : 1	DESIGN UNITS <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH	DIMENSIONS: <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	SHT REV
		4 PLACES $\pm 0, - - -$ $\pm, - - -$ 3 PLACES $\pm 0, - - -$ $\pm, 0 10$ 2 PLACES $\pm 0, 25$ $\pm, 0 15$ 1 PLACE $\pm 0, 38$ $\pm, - - -$	DRAWN BY & DATE J.WANG 98/08/24 CHECKED BY & DATE B.WIRKUS 98/08/24 APPROVED BY & DATE R.EDGLEY 98/08/24	TITLE: .093/(2.36) HOUSINGS PLUG AND RECEPTACLE 4 CKT., .264/(6.70) CTRS		MATERIAL NO. SEE SHT.3	DRAWING NO. SD -3191 -4*
J3	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	ANGLAR: $\pm 1$ °		CAD FILENAME S3191402.DGN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		

13 12 11 10 9 8 7 6 5 4 3 2 3191

PLUG	
PART NO.	ENG. NO.
19-09-2048	3191-4P
19-09-2049	3191-4P1
19-09-2047	3191-4P-A
19-09-2046	3191-4P1-A

RECEPTACLE	
PART NO.	ENG. NO.
19-09-1049	3191-4R1
19-09-1046	3191-4R1-A

### LEGEND

3191-4\*\*\*\*\*

CIRCUIT SIZE →

P = PLUG  
R = RECEPTACLE

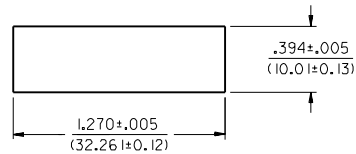
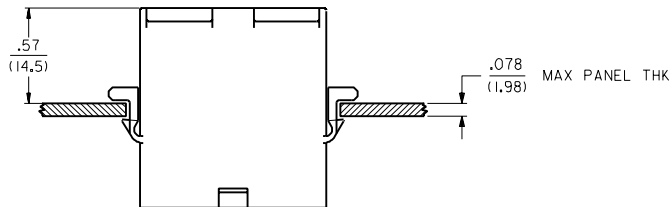
EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)  
I = WITHOUT EARS

COLOR: BLANK = NATURAL COLOR

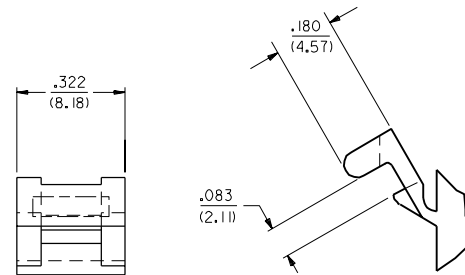
AM=AMBER BK=BLACK BU=BLUE  
BN=BROWN GY=GRAY GN=GREEN  
OR=ORANGE RD=RED YW=YELLOW

COLORS AVAILABLE ONLY IN 94V-2 MATERIAL

MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2 COLOR:NATURAL  
A=NYLON TYPE 6/6, 94V-0 COLOR:WHITE



RECOMMENDED HOLE CUTOUT



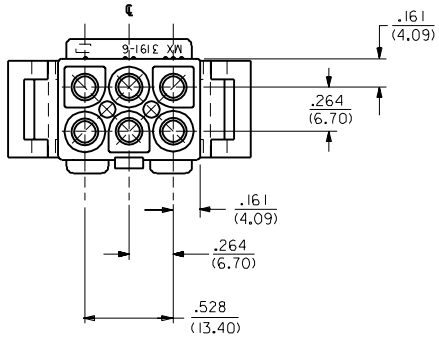
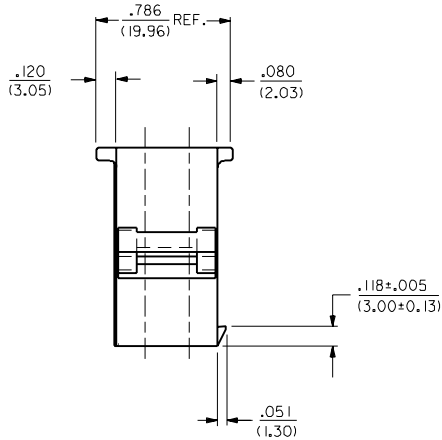
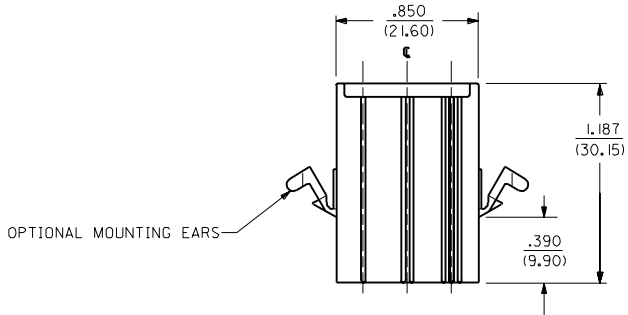
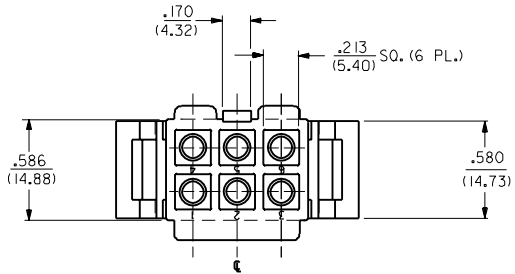
DETAIL "A"  
.093/(2.36) PREBENT MOUNTING EAR  
(SCALE 4:1)

J  
I  
H  
G  
F  
E  
D  
C  
B  
A

J  
I  
H  
G  
F  
E  
D  
C  
B  
A

EC NO. UCR1998-0254 DRAWN BY J.WANG 000607 CHKD BY B.WIRKUS 000607 APPRD BY R.EDGLEY 000607	QUALITY SYMBOLS MAJOR = 0 CRITICAL = 0	GENERAL TOLERANCES: (UNLESS SPECIFIED)		SCALE 2 : 1	DESIGN UNITS <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH	THIRD ANGLE PROJECTION	DIMENSIONS: <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	SHT	REV
		4 PLACES ±0.--- ±.--- 3 PLACES ±0.--- ±.010 2 PLACES ±0.25 ±.015 1 PLACE ±0.38 ±.---	mm	INCH	DRAWN BY & DATE J.WANG 98/08/18	CHECKED BY & DATE B.WIRKUS 98/08/18	TITLE: .093/(2.36) HOUSINGS PLUG AND RECEPTACLE 4-CKTS, .264/(6.70) CTRS		
J3	DESCRIPTION	ANGULAR: ± 1 °		CAD FILENAME S3191403.DGN	MATERIAL NO. SEE SHT.3	DRAWING NO. SD -3191-4*	SHEET NO. 3	REVISE ON CAD ONLY	
		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.		MOLEX INCORPORATED		SIZE C	

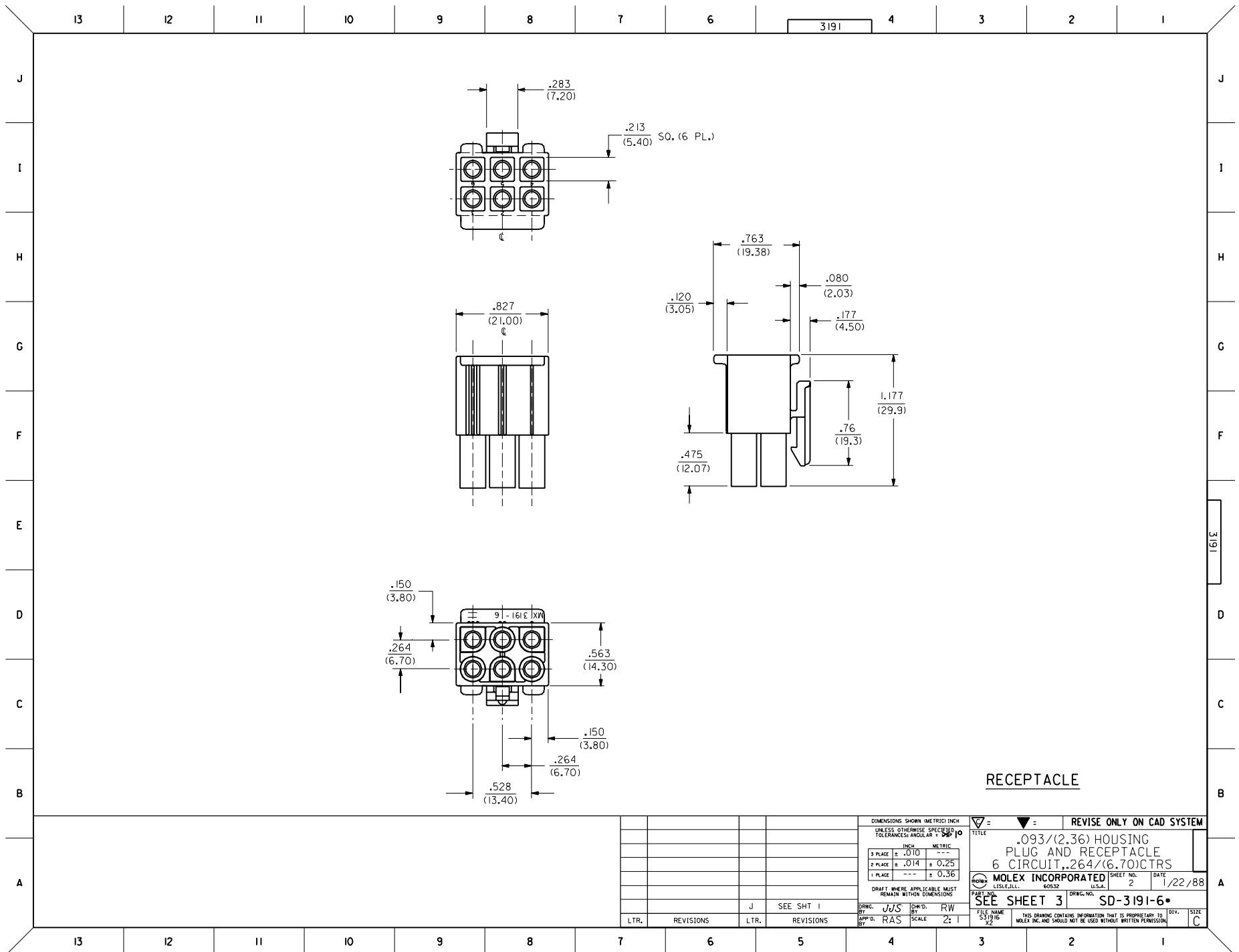
LBORD.DGN REV A 96/06/12 LEVEL 5 12 11 10 9 8 7 6 5 4 3 2 1



PLUG

MI	ADD RAMP LENGTH ECN #U4 0293 3-1-94 RW
M	REVISED PER ECR # U90659 KBW 07-25-89 RW
L	ADDED STANDOFFS PER ECR UB 2271 GEP 11-30-88 RW
K	REV. & FINAL REL. ECR UB 1710 GEP 7-14-88 RW
J	REVISED & REDRAWN PER ECR UB 0122 2-2-88 SCHAFFER
MFG.	SH. REV. LTR. REVISIONS

DIMENSIONS SHOWN METRIC (INCH)		▽ = 0	▼ = 0	REVISE ONLY ON CAD SYSTEM
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± .04°		TITLE		
INCH METRIC		.093/(2.36) HOUSING PLUG AND RECEPTACLE 6 CKT. .264/(6.70) CTRS.		
3 PLACE ± .010	---	MOLEX INCORPORATED SHEET NO. DATE L15LEJLL. 60532 U.S.A. 1 OF 3 1/25/88		
2 PLACE ± .014	± 0.25	PART NO. DRWG. NO.		
1 PLACE ---	± 0.36	SEE CHART SD-3191-6*		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APP'D. BY: JUS DRW'D. BY: RW SCALE: 2 : 1 FILE NAME: S31916.X1 APP'D. RAS		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		SIZE: CP C		



RECEPTACLE

DIMENSIONS SHOWN (METRIC) INCH  
UNLESS OTHERWISE SPECIFIED  
TOLERANCES ANGLES ARE ± .001

	INCH	METRIC
3 PLACE	± .010	---
2 PLACE	± .014	± 0.25
1 PLACE	---	± 0.36

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

REVISE ONLY ON CAD SYSTEM

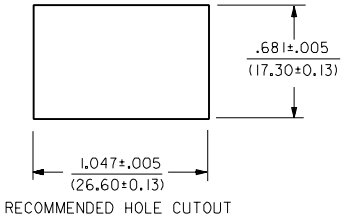
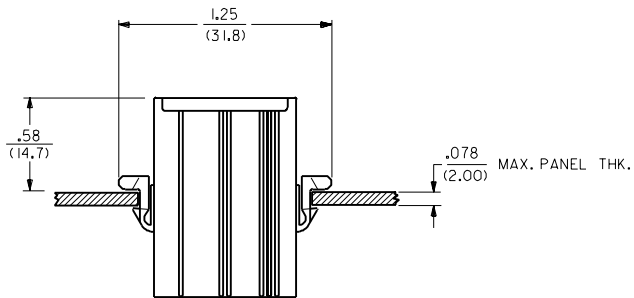
TITLE  
.093/(2.36) HOUSING  
PLUG AND RECEPTACLE  
6 CIRCUIT, .264/(6.70) CTRS

<b>MOLEX INCORPORATED</b> LITTLE ROCK, AR 60532 U.S.A.	SHEET NO.	DATE
	2	1/22/88
PART NO. <b>SEE SHEET 3</b>	DRWG. NO.	
	<b>SD-3191-6•</b>	
FILE NAME S31916.XZ	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	
	DIV.	SIZE
	C	C

LTR.	REVISIONS	LTR.	REVISIONS
		J	SEE SHT 1

DRWG. BY: JUS  
APP'D. BY: RAS  
CHK'D. BY: RW  
SCALE: 2:1

	13	12	11	10	9	8	7	6	3191	4	3	2	1		
	PLUG		RECEPTACLE											LEGEND:	
J	PART NO.	ENG. NO.	PART NO.	ENG. NO.										3191-6****-*	
	19-09-2068	3191-6P	19-09-1069	3191-6R1										CIRCUIT SIZE	
	19-09-2069	3191-6P1	19-09-1066	3191-6R1-201										P = PLUG	
	19-09-2067	3191-6P-201	19-09-6060	3191-6R IRD										R = RECEPTACLE	
	19-09-2066	3191-6P1-201	19-09-6069	3191-6R IBK										EARS: BLANK = WITH PREBENT EARS (PLUG ONLY)	
I	19-09-7069	3191-6PRD												I = WITHOUT EARS	
	19-09-7068	3191-6PBK												COLOR: BLANK = NATURAL COLOR	
														AM=AMBER BK=BLACK BU=BLUE	
H														BN=BROWN GY=GRAY GN=GREEN	
														OR=ORANGE RD=RED YW=YELLOW	
														COLORS AVAILABLE ONLY IN 94V-2 MATERIAL	
														MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2	
														201=NYLON TYPE 6/6, 94V-0	
G															
F															
E															
D															
C															
B															
A															
	13	12	11	10	9	8	7	6	5	4	3	2	1		



MOUNTING HOLE DETAIL

COLOR: BLANK = NATURAL COLOR  
 AM=AMBER BK=BLACK BU=BLUE  
 BN=BROWN GY=GRAY GN=GREEN  
 OR=ORANGE RD=RED YW=YELLOW  
 COLORS AVAILABLE ONLY IN 94V-2 MATERIAL  
 MATERIAL: BLANK=NYLON TYPE 6/6, 94V-2  
 201=NYLON TYPE 6/6, 94V-0

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES ANGLES ARE ± DPM		REVISIONS		REVISIONS		REVISIONS		REVISIONS		REVISIONS		REVISIONS	
3 PLACE	± .010	---		M	SEE SHEET 1	L	SEE SHT. 1	K	SEE SHT. 1	J	SEE SHT. 1				
2 PLACE	± .014	± 0.25													
1 PLACE	---	± 0.36													
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS															
DRWG. BY: JUS		CHK'D. BY: RW		APP'D. BY: RAS		SCALE: --:--		FILE NAME: S31916X3.DGN		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DATE: 1/22/88		SHEET NO.: 3	
TITLE: .093/(2.36) HOUSINGS PLUG AND RECEPTACLE 6 CKT., .264/(6.70) CTRS.		PART NO.: SEE CHART		DRAWG. NO.: SD-3191-6*		MATERIAL: NYLON TYPE 6/6, 94V-2		COLOR: BLANK		EARS: BLANK		CIRCUIT SIZE: 3191-6****-*		MOUNTING HOLE DETAIL	