

**Jones
Plugs/Sockets
Series 300**

Multiple Density
Solder Eyelet



FEATURES

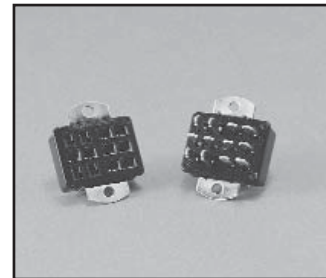
- Solder lug terminals with .093" x .062" (2.36mm x 1.57mm) wiring holes.
- Two-contact "Jones" connector is round, all others are rectangular.
- For use in cable-to-panel and cable-to-cable applications.
- Designed for light and medium duty.
- Plug prongs are .156" (3.96mm) wide and .047" (1.19mm) thick.
- Polarized to prevent wrong-way insertion.
- Plugs have projecting flat blades, sockets have recessed twin bellows.
- Cable clamps of zinc and clear irridite-plated steel used for strain relief.
- UL Recognized-file E170218 (UL 1977), E130965 (UL1863).
- CSA-LR31996.
- See Panel Cutout dimension on page (2-38).

MATERIALS

Insulation Material: Molded monoblock, general purpose phenolic, black UL94V-1
Contact Material: Plug: Brass
 Socket: Phosphor bronze
Contact Plating: Cadmium
Operating Temperature: Up to +105°C
Hood Material: UL 94V-0 rated thermoplastic

ELECTRICAL

Operating Voltage: 250 VAC RMS maximum
Current Rating: 10 Amps
Contact Resistance: 16 Milliohms maximum



Marketed exclusively through distribution.

Polarizing Patterns - 300 Series



302



304



308



303



306



310



312



315-12



324,327,330



315,318,321



333

Marketed exclusively through distribution.

Mounting Dimensions

Reference	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
303	.453	11.51	1.016	25.81	.750	19.05	-	-
304	.719	18.26	.781	19.84	1.000	25.40	-	-
306	.719	18.26	1.031	26.19	1.000	25.40	-	-
308	.719	18.26	1.281	32.54	1.000	25.40	-	-
310	.719	18.26	1.578	40.08	1.000	25.40	-	-
312	.953	24.21	1.266	32.16	1.250	31.75	-	-
315-12	.953	24.21	1.516	38.51	1.250	31.75	-	-
315	1.016	25.81	1.641	41.68	1.375	34.93	-	-
318	1.016	25.81	1.953	49.61	1.375	34.93	.625	15.88
321	1.016	25.81	2.266	57.56	1.375	34.93	.469	11.91
324	1.016	25.81	2.578	65.48	1.375	34.93	.625	15.88
327	1.016	25.81	2.891	73.43	1.375	34.93	.781	19.84
330	1.016	25.81	3.203	81.36	1.375	34.93	.938	23.83
333	1.016	25.81	3.516	89.31	1.375	34.93	1.094	27.79

NOTE: For 300 Series 2 through 33 contact angle bracket connectors. All mounting holes are .156" (3.96mm) dia. Maximum chassis thickness is .063" (1.59mm) for bottom mounting. Mounting holes are located on center line unless otherwise shown.



Marketed exclusively through distribution.

No. of Contacts	With Angle Bracket		No. of Contacts	Less Angle Bracket	
	Catalog No. Plug	Catalog No. Socket		Catalog No. Plug	Catalog No. Socket
2	P-302-AB	S-302-AB	2	P-302-LAB	S-302-LAB
3	P-303-AB	S-303-AB	3	P-303-LAB	S-303-LAB
4	P-304-AB	S-304-AB	4	P-304-LAB	S-304-LAB
6	P-306-AB	S-306-AB	6	P-306-LAB	S-306-LAB
8	N/A	N/A	8	N/A	N/A
10	P-310-AB	N/A	10	P-310-LAB	N/A
12	P-312-AB	N/A	12	P-312-LAB	N/A
15*	N/A	S-315-12-AB	15	N/A	S-315-12-LAB
15	P-315-AB	S-315-AB	15	P-315-LAB	S-315-LAB
18	P-318-AB	S-318-AB	18	P-318-LAB	S-318-LAB
21	P-321-AB	S-321-AB	21	P-321-LAB	S-321-LAB
24	P-324-AB	S-324-AB	24	P-324-LAB	S-324-LAB
27	P-327-AB	S-327-AB	27	P-327-LAB	S-327-LAB
30	P-330-AB	S-330-AB	30	P-330-LAB	S-330-LAB
33	P-333-AB	S-333-AB	33	P-333-LAB	S-333-LAB

X = length of plug contacts. This dimension does not apply to sockets.
Y = length of plug or socket tails.



No. of Contacts	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
2	.656	16.67	-	-	.969	24.61	1.219	30.96
3	1.000	25.40	.438	11.11	.750	19.05	1.062	26.99
4	.750	19.05	.688	17.46	1.000	25.40	1.312	33.34
6	1.000	25.40	.688	17.46	1.000	25.40	1.312	33.34
8	--	--	--	--	--	--	--	--
10	1.562	39.69	.688	17.46	1.000	25.40	1.312	33.34
12	1.250	31.75	.938	23.81	1.250	31.75	1.562	39.69
15*	1.500	38.10	.938	23.81	1.250	31.75	1.562	39.69

*Special 15 contact arrangement to allow 12-position mating.

Reference	L		M		Polarizing Pin
	in	mm	in	mm	
15	1.625	41.28	See note	-	NO
18	1.938	49.23	1.250	31.75	NO
21	2.250	57.15	.938	23.81	NO
24	2.563	65.10	1.250	31.75	14
27	2.875	73.03	1.562	39.69	14
30	3.188	80.98	1.875	47.63	14
33	3.500	88.90	2.188	55.58	17

NOTE: 15-position plug and socket require only two mounting brackets, mounted on center of connector.

Marketed exclusively through distribution.

300 Series with Flush Plate (FP)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
2	P-302-FP	S-302-FP
3	P-303-FP	S-303-FP
4	P-304-FP	S-304-FP
6	P-306-FP	S-306-FP
8	N/A	N/A
10	P-310-FP	N/A
12	P-312-FP	N/A

NOTE: Not available in contact sizes 15-33.



X = length of plug contacts. This dimension does not apply to sockets.
Y = length of plug or socket tails.



Dimensions - Plug or Socket

No. of Contacts	A		B		C		D		E Max.	
	in	mm	in	mm	in	mm	in	mm	in	mm
2	2.063	52.40	1.250	31.75	1.750	44.45	-	-	.719	18.26
3	2.063	52.40	1.250	31.75	1.750	44.45	.938	23.81	.500	12.70
4	2.063	52.40	1.250	31.75	1.750	44.45	.688	17.46	.750	19.05
6	2.063	52.40	1.250	31.75	1.750	44.45	.938	23.81	.750	19.05
8	--	--	--	--	--	--	--	--	--	--
10	2.563	65.10	1.750	44.45	2.250	57.15	1.500	38.10	.750	19.05
12	2.563	65.10	1.750	44.45	2.250	57.15	1.188	30.16	1.000	25.40

Panel Cutout Dimensions

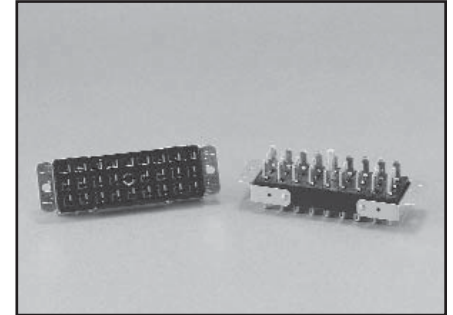
Reference	A		B		C	
	in	mm	in	mm	in	mm
303-FP	.953	24.21	.516	13.11	1.750	44.45
304-FP	.703	17.86	.766	19.46	1.750	44.45
306-FP	.953	24.21	.766	19.46	1.750	44.45
308-FP	--	--	--	--	--	--
310-FP	1.516	38.51	.766	19.46	2.250	57.15
312-FP	1.203	30.56	1.016	25.81	2.250	57.15

Marketed exclusively through distribution.

300 Series with End Brackets (EB)

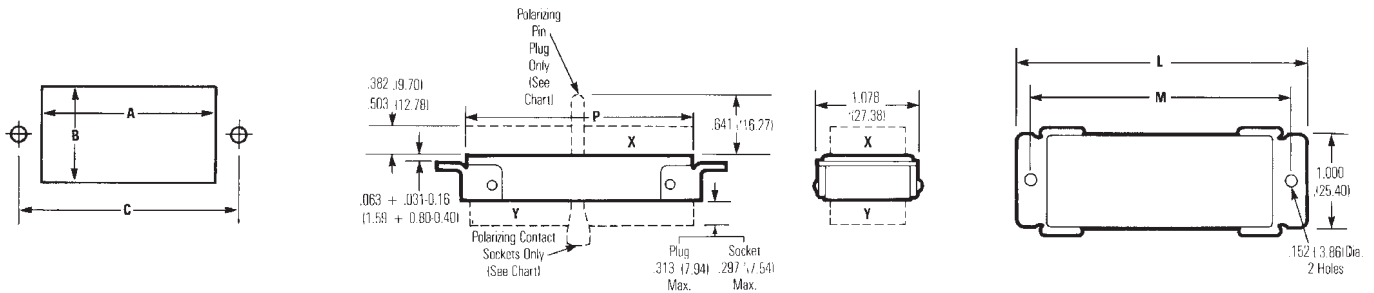
No. of Contacts	Catalog No. Plug	Catalog No. Socket
15	P-315-EB	S-315-EB
18	P-318-EB	S-318-EB
21	P-321-EB	S-321-EB
24	P-324-EB	S-324-EB
28	P-328-EB	S-328-EB
30	P-330-EB	S-330-EB
33	P-333-EB	S-333-EB

NOTE: Not available in contact sizes 2-12.



2

X = length of plug contacts. This dimension does not apply to sockets.
Y = length of plug or socket tails.



Dimensions

No. of Contacts	L		M		P		Polarizing Pin
	±.031	(.79mm)	±.031	(.79mm)	±.063	(1.59mm)	
15	2.313	58.75	2.000	50.80	1.625	41.28	NO
18	2.625	66.68	2.313	58.75	1.938	49.23	NO
21	2.938	74.63	2.625	66.68	2.250	57.15	NO
24	3.250	82.55	2.938	74.63	2.563	65.10	14
27	3.563	90.50	3.250	82.55	2.875	73.03	14
30	3.875	98.43	3.563	90.50	3.188	80.98	14
33	4.188	106.38	3.875	98.43	3.500	88.90	17

Panel Cutout Dimensions

Reference	A		B		C	
	in	mm	in	mm	in	mm
315-EB	1.641	41.68	1.016	25.81	2.000	50.80
318-EB	1.953	49.61	1.016	25.81	2.313	58.75
321-EB	2.266	57.56	1.016	25.81	2.625	66.68
324-EB	2.578	65.48	1.016	25.81	2.938	74.63
327-EB	2.891	73.43	1.016	25.81	3.250	82.55
330-EB	3.203	81.36	1.016	25.81	3.563	90.50
333-EB	3.516	89.31	1.016	25.81	3.875	98.43

Marketed exclusively through distribution.

300 Series with Recessed Plate (RP)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
2	P-302-RP	S-302-RP
3	P-303-RP	S-303-RP
4	P-304-RP	S-304-RP
6	P-306-RP	S-306-RP
8	N/A	N/A
10	P-310-RP	N/A
12	P-312-RP	N/A

NOTE: Not available in contact sizes 15-33.



Y = length of plug or socket tails.

Dimensions

No. of Contacts	A		B		C		D Max.	
	in	mm	in	mm	in	mm	in	mm
2	2.063	52.40	1.500	38.10	1.750	44.45	1.350	34.29
3	2.063	52.40	1.500	38.10	1.750	44.45	1.350	34.29
4	2.063	52.40	1.500	38.10	1.750	44.45	1.350	34.29
6	2.063	52.40	1.500	38.10	1.750	44.45	1.350	34.29
8	--	--	--	--	--	--	--	--
10	2.563	65.10	2.000	50.80	2.250	57.15	1.850	46.99
12	2.563	65.10	2.000	50.80	2.250	57.15	1.850	46.99

Marketed exclusively through distribution.

300 Series with Shallow Bracket (SB)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
15	P-315-SB	S-315-SB
18	P-318-SB	S-318-SB
21	P-321-SB	S-321-SB
24	P-324-SB	S-324-SB
27	P-327-SB	S-327-SB
30	P-330-SB	S-330-SB
33	P-333-SB	S-333-SB

NOTE: Not available in contact sizes 2-12.



2



X = length of plug contacts. This dimension does not apply to sockets.
Y = length of plug or socket tails.

Dimensions

No. of Polarizing Contacts	A		M		L		Polarizing Pin
	±.031 in	(.79mm) mm	±.031 in	(.79mm) mm	±.063 in	(1.59mm) mm	
15	1.688	42.86	2.125	53.98	2.547	64.69	NO
18	2.000	50.80	2.438	61.93	2.859	72.62	NO
21	2.313	58.75	2.750	69.85	3.172	80.57	NO
24	2.625	66.68	2.063	52.40	3.484	88.49	14
27	2.938	74.63	3.375	85.73	3.797	96.44	14
30	3.250	82.55	3.688	93.68	4.109	104.38	14
33	3.563	90.50	4.000	101.60	4.422	112.32	17

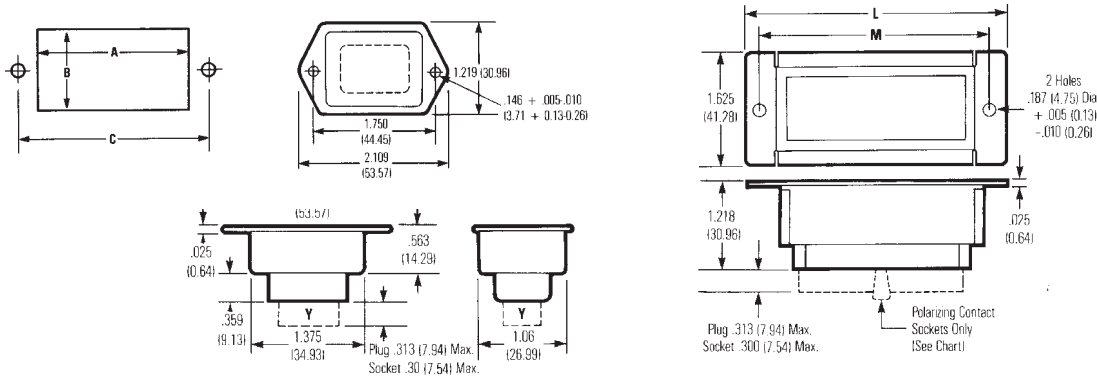
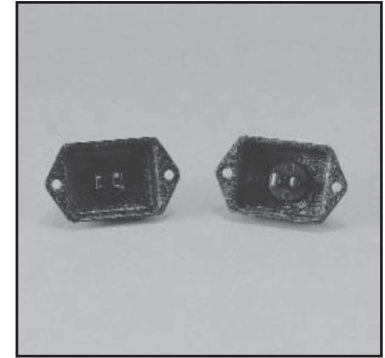
Panel Cutout Dimensions

Reference	A		B		C	
	in	mm	in	mm	in	mm
315-SB	1.750	44.45	1.156	29.36	2.125	53.98
318-SB	2.063	52.40	1.156	29.36	2.438	61.93
321-SB	2.375	60.33	1.156	29.36	2.750	69.85
324-SB	2.688	68.28	1.156	29.36	3.062	77.77
327-SB	3.000	76.20	1.156	29.36	3.376	85.75
330-SB	3.313	84.15	1.156	29.36	3.688	93.68
333-SB	3.625	92.08	1.156	29.36	4.000	101.60

Marketed exclusively through distribution.

300 Series Deep Bracket (DB)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
2	P-302-DB	S-302-DB
3	P-303-DB	S-303-DB
4	P-304-DB	S-304-DB
6	P-306-DB	S-306-DB
8	N/A	N/A
10	N/A	N/A
12	P-312-DB	N/A
15	P-315-DB	S-315-DB
18	P-318-DB	S-318-DB
21	P-321-DB	S-321-DB
24	P-324-DB	S-324-DB
27	P-327-DB	S-327-DB
30	P-330-DB	S-330-DB
33	P-333-DB	S-333-DB



Dimensions

Y = length of plug or socket tails.

No. of Contacts	L		M		Polarizing Pin
	±.063 (1.60mm)		±.031 (.79mm)		
	in	mm	in	mm	
15	2.813	71.44	2.375	60.33	NO
18	3.125	79.38	2.688	68.28	NO
21	3.437	87.31	3.000	76.20	NO
24	3.750	95.25	3.313	84.15	14
27	4.063	103.19	3.625	92.08	14
30	4.375	111.13	3.938	100.03	14
33	4.688	119.06	4.250	107.95	17

Panel Cutout Dimensions

Reference	A		B		C	
	in	mm	in	mm	in	mm
302-DB thru						
312-DB	1.453	36.91	1.125	28.58	1.750	38.10
315-DB	2.000	50.80	1.438	36.53	2.376	60.35
318-DB	2.313	58.75	1.438	36.53	2.688	68.28
321-DB	2.625	66.68	1.438	36.53	3.000	76.20
324-DB	2.938	74.63	1.438	36.53	3.312	84.12
327-DB	3.250	82.55	1.438	36.53	3.626	92.10
330-DB	3.562	90.47	1.438	36.53	3.938	100.03
333-DB	3.875	98.43	1.438	36.53	4.250	107.95

Marketed exclusively through distribution.

300 Series with Hood and 90° Cable Clamp (CCE)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
2	P-302-CCE	S-302-CCE
3	P-303-CCE	S-303-CCE
4	P-304-CCE	S-304-CCE
6	P-306-CCE	S-306-CCE
8	N/A	N/A
10	P-310-CCE	N/A
12	P-312-CCE	N/A
15	P-315-CCE	S-315-CCE
18	P-318-CCE	S-318-CCE
21	P-321-CCE	S-321-CCE
24	P-324-CCE	S-324-CCE
27	P-327-CCE	S-327-CCE
30	P-330-CCE	S-330-CCE
33	P-333-CCE	S-333-CCE



2



Dimensions

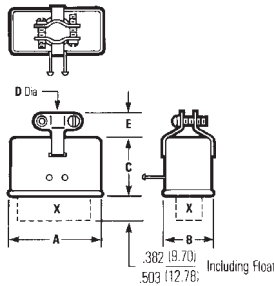
No. of Contacts	A ±.016 (.41mm)		B ±.016 (.41mm)		C ±.031 (.79mm)		G		Cable "D" Opening	
	in	mm	in	mm	in	mm	in	mm	in	mm
2	.691	17.55	-	-	.953	24.21	.313	7.95	.313	7.95
3	1.034	26.26	.472	11.99	.953	24.21	.344	8.74	.250	6.35
4	.786	19.96	.724	18.39	.953	24.21	.453	11.51	.375	9.53
6	1.036	26.31	.724	18.39	.078	27.38	.469	11.91	.438	11.13
8	--	--	--	--	--	--	--	--	--	--
10	1.592	40.44	.720	18.29	1.203	30.56	.359	9.12	.500	12.70
12	1.286	32.66	.974	24.74	1.203	30.56	.422	10.72	.563	14.30

No. of Contacts	E		L		Cable Opening		Polarizing Pin
	in	mm	in	mm	in	mm	
15	2.514	63.85	1.795	45.59	.563	14.30	NO
18	2.826	71.78	2.107	53.52	.563	14.30	NO
21	3.139	79.73	2.420	61.47	.625	15.88	NO
24	3.451	87.66	2.732	69.39	.625	15.88	14
27	3.764	95.61	3.045	77.34	.625	15.88	14
30	4.076	103.53	3.357	85.27	.750	19.05	14
33	4.389	111.48	3.670	93.22	.750	19.05	17

Marketed exclusively through distribution.

300 Series with Hood and 180° Cable Clamp (CCT)

No. of Contacts	Catalog No. Plug	Catalog No. Socket
2	P-302-CCT	S-302-CCT
3	P-303-CCT	S-303-CCT
4	P-304-CCT	S-304-CCT
6	P-306-CCT	S-306-CCT
8	N/A	N/A
10	P-310-CCT	N/A
12	P-312-CCT	N/A
15	P-315-CCT	S-315-CCT
18	P-318-CCT	S-318-CCT
21	P-321-CCT	S-321-CCT
24	P-324-CCT	S-324-CCT
27	P-327-CCT	S-327-CCT
30	P-330-CCT	S-330-CCT
33	P-333-CCT	S-333-CCT



Dimensions

No. of Contacts	A ±.016 (.41mm)		B ±.016 (.41mm)		C ±.031 (.79mm)		"D" Cable Opening		E ±.031 (.79mm)	
	in	mm	in	mm	in	mm	in	mm	in	mm
2	.691	17.55	-	-	.953	24.21	.375	9.53	.359	9.12
3	1.034	26.26	.472	11.99	.953	24.21	.313	7.95	.359	9.12
4	.786	19.96	.724	18.39	.953	24.21	.375	9.53	.469	11.91
6	1.036	26.31	.724	18.39	1.078	27.38	.438	11.13	.484	12.29
8	--	--	--	--	--	--	--	--	--	--
10	1.592	40.44	.720	18.29	1.203	30.56	.500	12.70	.500	12.70
12	1.286	32.66	.974	24.74	1.203	30.56	.563	14.30	.469	11.91

No. of Contacts	L		Cable Opening		Polarizing Pin
	in	mm	in	mm	
15	1.795	45.59	.563	14.30	NO
18	2.107	53.52	.563	14.30	NO
21	2.420	61.47	.625	15.88	NO
24	2.732	69.39	.625	15.88	14
27	3.045	77.34	.625	15.88	14
30	3.357	85.27	.750	19.05	14
33	3.670	93.22	.750	19.05	17

Marketed exclusively through distribution.

**Jones
Plugs/Sockets
Series 300**

Multiple Density
Solder Eyelet
180° Clamp w/Locks



300 Series Plug with Hood and Lock (CCT-L) and Socket with Hood and Keeper (CCT-K)

No. of Contacts	Catalog No. Plug w/ Lock	Catalog No. Socket w/ Keeper
2	P-302-CCT-L	S-302-CCT-K
3	P-303-CCT-L	S-303-CCT-K
4	P-304-CCT-L	S-304-CCT-K
6	P-306-CCT-L	S-306-CCT-K
8	N/A	N/A
10	P-310-CCT-L	N/A
12	P-312-CCT-L	N/A
15	P-315-CCT-L	S-315-CCT-K
18	P-318-CCT-L	S-318-CCT-K
21	P-321-CCT-L	S-321-CCT-K
24	P-324-CCT-L	S-324-CCT-K
27	P-327-CCT-L	S-327-CCT-K
30	P-330-CCT-L	S-330-CCT-K
33	P-333-CCT-L	S-333-CCT-K



2



Dimensions

No. of Contacts	A ±.016 (.41mm)		B ±.016 (.41mm)		C ±.031 (.79mm)		F		"D" Cable Opening		Polarizing Pin
	in	mm	in	mm	in	mm	in	mm	in	mm	
2	.691	17.5	-	-	.953	24.21	.359	9.12	.375	9.53	--
3	1.034	26.26	.472	11.99	.953	24.21	.359	9.12	.313	7.94	--
4	.786	19.96	.724	18.39	.953	24.21	.469	11.91	.375	9.53	--
6	1.036	26.31	.724	18.39	1.078	27.38	.484	12.29	.438	11.13	--
8	--	--	--	--	--	--	--	--	--	--	--
10	1.592	40.44	.720	18.29	1.203	30.56	.500	12.70	.500	12.70	--
12	1.286	32.66	.974	24.74	1.203	30.56	.469	11.91	.563	14.30	--
15	1.795	45.59	1.100	27.94	1.850	46.99	.712	18.08	.563	14.30	NO
18	2.107	53.52	1.100	27.94	1.850	46.99	.712	18.08	.563	14.30	NO
21	2.420	61.47	1.100	27.94	1.850	46.99	.712	18.08	.625	15.88	NO
24	2.732	69.39	1.100	27.94	1.850	46.99	.712	18.08	.625	15.88	14
27	3.045	77.34	1.100	27.94	1.850	46.99	.712	18.08	.625	15.88	14
30	3.357	85.27	1.100	27.94	1.850	46.99	.712	18.08	.750	19.05	14
33	3.670	93.22	1.100	27.94	1.850	46.99	.712	18.08	.750	19.05	17

Marketed exclusively through distribution.

JONES PLUGS AND SOCKETS 300 SERIES MATING CHART

PLUGS

MOUNTING CONFIG.	AB	DB	FP	RP	EB	SB	CCE	CCT	CCT-L	CCT-K	LAB
AB	●*		●*		●*	●*	●	●			●
DB								●			●
FP	●*		●*		●*		●	●			●
RP							●	●			●
EB	●*		●*		●*		●	●			●
SB	●*				●*	●*	●	●			●
CCE	●		●	●	●	●	●	●			●
CCT	●	●	●	●	●	●	●	●			●
CCT-L										●	
CCT-K									●		
LAB	●	●	●	●	●	●	●	●	●	●	●

- These are recommended configurations.
- * These are possible configurations, but not normally recommended.

NOTE: Cinch layout S315-12 is available only in "AB" or "LAB".

Replacement Drive Pins for Series 300 Plugs and Sockets with Cable Caps and Clamps

Dimensions

Ordering Information

No. of Contacts	Dim. L		No. of Contacts	Catalog No.
	+ .005 (.13mm) in	mm		
2	.687	17.45	2	302R
3	.468	11.89	3	303R
4,6,8,10*	.718	18.24	4,6,8,10*	304R
12	.953	28.58	12	312R
15-33*	1.125	28.58	15-33*	333R



*10 contact size and 15 through 33 contact sizes require two pins per unit; all other sizes require only one.

Marketed exclusively through distribution.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А