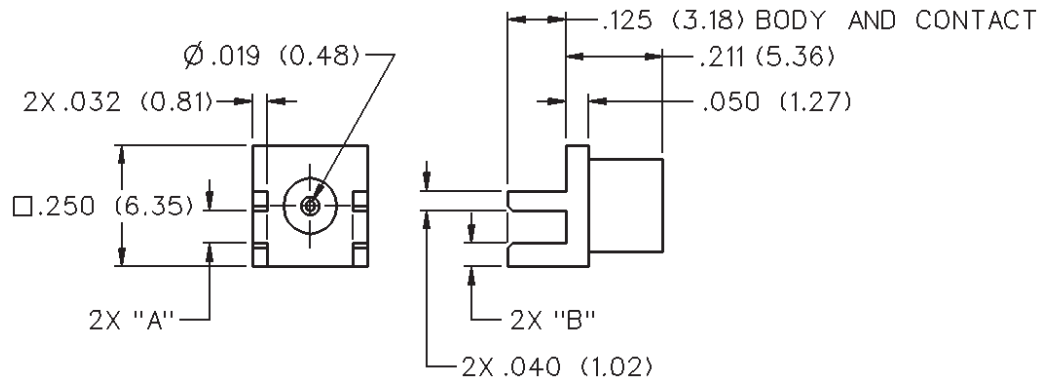
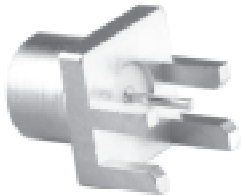


MCX 50 Ohm End Launch Jack Receptacle - Round Contact



BOARD THICKNESS	GOLD PLATED	NICKEL PLATED	"A"	"B"
.062 (1.57)	133-3701-801	133-3701-806	.068 (1.73)	.048 (1.22)

Specifications



ELECTRICAL RATINGS

Impedance: 50 Ohms

Frequency Range: Connectors 0-6 GHz
 Dummy loads 0-1 GHz

VSWR: (f = GHz)

	Straight Cabled <u>Connectors</u>	Right Angle <u>Cabled Connectors</u>
1	1.00	1.00
2	1.00	1.00
3	1.00	1.00
4	1.00	1.00
5	1.00	1.00
6	1.00	1.00
7	1.00	1.00
8	1.00	1.00
9	1.00	1.00
10	1.00	1.00
11	1.00	1.00
12	1.00	1.00
13	1.00	1.00
14	1.00	1.00
15	1.00	1.00
16	1.00	1.00
17	1.00	1.00
18	1.00	1.00
19	1.00	1.00
20	1.00	1.00
21	1.00	1.00
22	1.00	1.00
23	1.00	1.00
24	1.00	1.00
25	1.00	1.00
26	1.00	1.00
27	1.00	1.00
28	1.00	1.00
29	1.00	1.00
30	1.00	1.00
31	1.00	1.00
32	1.00	1.00
33	1.00	1.00
34	1.00	1.00
35	1.00	1.00
36	1.00	1.00
37	1.00	1.00
38	1.00	1.00
39	1.00	1.00
40	1.00	1.00
41	1.00	1.00
42	1.00	1.00
43	1.00	1.00
44	1.00	1.00
45	1.00	1.00
46	1.00	1.00
47	1.00	1.00
48	1.00	1.00
49	1.00	1.00
50	1.00	1.00
51	1.00	1.00
52	1.00	1.00
53	1.00	1.00
54	1.00	1.00
55	1.00	1.00
56	1.00	1.00
57	1.00	1.00
58	1.00	1.00
59	1.00	1.00
60	1.00	1.00
61	1.00	1.00
62	1.00	1.00
63	1.00	1.00
64	1.00	1.00
65	1.00	1.00
66	1.00	1.00
67	1.00	1.00
68	1.00	1.00
69	1.00	1.00
70	1.00	1.00
71	1.00	1.00
72	1.00	1.00
73	1.00	1.00
74	1.00	1.00
75	1.00	1.00
76	1.00	1.00
77	1.00	1.00
78	1.00	1.00
79	1.00	1.00
80	1.00	1.00
81	1.00	1.00
82	1.00	1.00
83	1.00	1.00
84	1.00	1.00
85	1.00	1.00
86	1.00	1.00
87	1.00	1.00
88	1.00	1.00
89	1.00	1.00
90	1.00	1.00
91	1.00	1.00
92	1.00	1.00
93	1.00	1.00
94	1.00	1.00
95	1.00	1.00
96	1.00	1.00
97	1.00	1.00
98	1.00	1.00
99	1.00	1.00
100	1.00	1.00

RG-178 cable	1.17 + .04f	1.07 + .06f
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RG-316 and .086 semi-rigid cable ...	1.13 + .04f	1.07 + .04f
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Adapters 1.13 + .04f

Uncabled receptacles, Dummy loads N/A

Working Voltage: (V_{rms} maximum)†

<u>Connectors for Cable Type</u>	<u>Sea Level</u>	<u>70K Feet</u>
----------------------------------	------------------	-----------------

RG-178	250	65
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RG-316, .086 semi-rigid uncabled

uncabled receptacles, adapters	335	85
--------------------------------------	-----	----

Dummy loads N/A

Dielectric Withstanding Voltage: (VRMS minimum at sea level)

Connectors for RG-178	750
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Connectors for RG-316, .086 semi-rigid,

uncabled receptacles, adapters	1000
--------------------------------------	------

Dummy loads N/A

Corona Level: (Volts minimum at 70,000 feet)

Connectors for RG-178 190

Connectors for RG-316, .086 semi-rigid

uncabled receptacles, adapters	250
--------------------------------------	-----

Dummy loads	N/A
-------------------	-----

Insertion Loss: (dB maximum, tested at 1 GHz)

Straight cable connectors and adapters 0.1 dB

Right angle cable connectors	0.2 dB
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Uncabled receptacles, dummy loads	N/A
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Insulation Resistance: 10.000 megohms minimum

Contact Resistance: (milliohms maximum)

Initial	After Environmental
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Center contact (straight cabled connectors, uncabled receptacles and adapters)	5.0	8.0
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Center contact (right angle cabled connectors)	5.0	15.0
---	-----	------

Outer contact	1.0	1.5
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Outer contact	1.0	1.0
Braid to body (gold plated connectors)	1.0	N/A

Braid to body (gold plated connectors)	1.0	N/A
Braid to body (nickel plated connectors)	2.5	N/A

RF Leakage: (dB typical tested at 2.5 GHz)

Cable connectors -55 dB

Cable connectors	99 92
Uncabled receptacles and adapters, dummy loads	N/A

Avoid user injury due to misapplication. See safety advisory definitions on page 2.

** All gold plated parts include a .00005" min. nickel underplate barrier layer.

Technical drawing showing the dimensions and tolerances for the JACK and PLUG components.

JACK Dimensions:

- REFERENCE PLANE
- $.0315 \pm .0020$ (0.80 ± 0.05)
- $.110$ (2.80) MAX
- $\phi .019 - \phi .021$ ($0.48 - 0.53$)
- $.010$ (0.25) MAX FLAT POINT
- $\phi .136 \pm .001$ (3.45 ± 0.03)
- 20°
- 45°
- $\phi .078$ MAX (1.98)
- $\phi .145 \pm .003$ (3.68 ± 0.08)
- $\phi .150$ (3.81) MIN
- $.000$ MIN
- $.110$ MAX (2.80)
- $.162$ MAX (4.11)

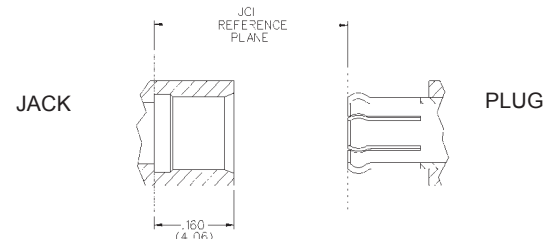
PLUG Dimensions:

- $.163$ MIN (4.14)
- $.000$ MIN
- $.010$ MIN (0.25)
- $\phi .135$ (3.43) MAX
- $\phi .078$ (1.98) MIN
- $.006$ (0.15) MIN
- $.047$ (1.19) MAX
- $.110$ (2.79) MIN
- $.110$ (2.79) MIN

Notes:

- NOTE 1: Points to the internal thread of the JACK.
- NOTE 2: Points to the internal thread of the PLUG.

JACK **PLUG**



NOTES

1. ID of contact to meet VSWR mating characteristics and connector durability when mated with a dia. .019-.021 (0.48-0.53) male contact.
2. Must meet the force to engage and disengage when mated with mating part.

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