

INCH-POUND

MIL-DTL-23971/3A
23 April 2002
SUPERSEDING
MIL-P-23971/3
2 December 1977

DETAIL SPECIFICATION SHEET

POWER DIVIDER, 4 PORT QUADRATURE,
PLUG-IN TERMINALS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the power divider described herein shall consist of this specification sheet and MIL-DTL-23971.

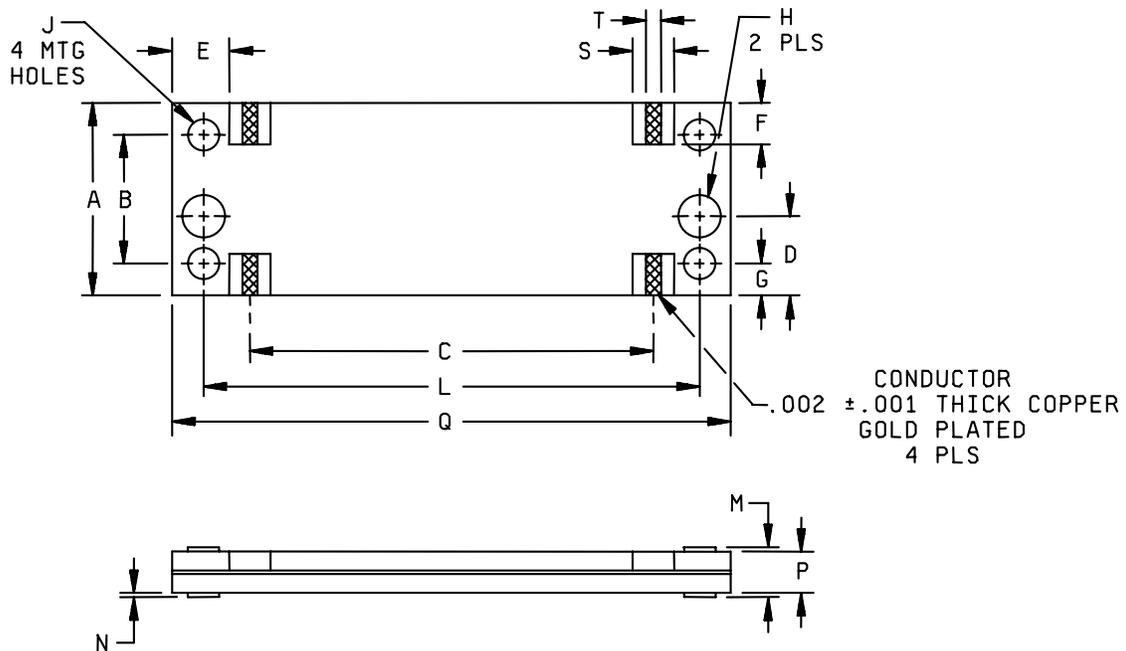


FIGURE 1. Dimensions and configuration.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance on decimals are ± 0.020 (.5 mm).

	Dimensions			
	Inches		Millimeters	
	Max	Min	Max	Min
A	.580	.540	14.7	13.7
B	.385	.365	9.78	9.27
C	1.18	1.16	30.0	29.5
D	.260	.200	6.60	5.08
E	.185	.145	4.70	3.68
F	.140	.100	3.56	2.54
G	.132	.082	3.35	2.08
H	.125 dia	N/A	3.17 dia	N/A
J	.098 dia	.088 dia	2.49 dia	2.24 dia
K	.255	.195	6.48	4.95
L	1.448	1.428	36.78	36.27
M	.154	.114	3.91	2.90
N	.015	.005	.38	.13
P	.120	N/A	3.0	N/A
Q	1.640	1.600	41.7	40.6
R	.111	.071	2.82	1.80
S	.140	.100	3.56	2.54

FIGURE 1. Dimensions and configuration - Continued.

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REQUIREMENTS:

Design and construction: See figure 1.

Terminals: Female plug-in.

Material: Copper or Iron-nickel alloy in accordance with SAE-AMS-I-23011, "Iron -Nickel Alloys for Sealing to Glasses and Ceramics", class I, (KOVAR). Nickel is to be used only if specification cannot be met using alternate material means.

Finish: Gold plated.

Ambient temperature:

Operating -54° to +110°C.
Storage -62° to +125°C.

Electrical performance characteristics:

Impedance: 50 ohms.
Frequency range: 225 to 400 GHz.
Coupling: 3 dB +.5, -0.

VSWR: 1.2:1 maximum.
Insertion loss: 0.25 dB maximum.
Isolation: 25 dB minimum.
Phase balance: 90° ±1.5°.
Amplitude balance: 0.4 dB.
Power level: 100 W average, 200 W peak.

Part number: M23971/3-01.

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5985-1227-03)

Review activities:
Navy - AS, MC, OS