INCH-POUND

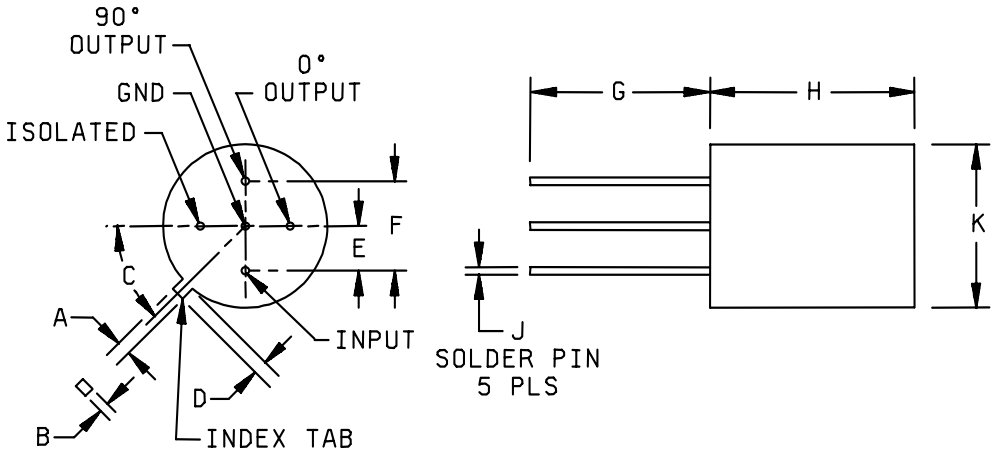
MIL-DTL-23971/11A
23 April 2002
SUPERSEDING
MIL-P-23971/11
22 February 1980

DETAIL SPECIFICATION SHEET

POWER DIVIDER/COMBINERS, QUADRATURE, TO-5

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.



	Dimensions			
	Inches		Millimeters	
	Max	Min	Max	Min
A	.034	.028	.86	.71
B	N/A	.009	N/A	.23
C	50°	40°	50°	40°
D	.034	.028	.86	.028
E	.11	.09	2.8	2.3
F	.21	.19	5.3	4.8
G	.44	.32	11.2	8.2
H	.50	N/A	12.7	N/A
J	.019 dia	.016 dia	.48 dia	.41 dia
K	.40	N/A	10.2	N/A

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 1. Dimensions and configuration, dash numbers 01 and 02.

TABLE I. Electrical performance characteristics and physical requirements.

M23971 /11-	Imped-ance (ohms)	Frequency range (MHz)	Average coupling (dB)	VSWR max	Insertion loss max (dB)	Isolation min (dB)	Phase balance max (degree)	Amplitude balance (dB) max	Power level		Weight pounds (grams)	Ambient temperature	
									avg (W)	pk (W)		Operating	Storage
01	50	29-31	3. +.5 -.0	1.2:1	0.2	25	± 2	1/	-	.25	.006 (2.72)	0° to +65°C	-65° to +71°C
02	50	91.2-100.8	3. +.2 -.0	1.2:1	0.2	25	± 2	1/	-	.25	.006 (2.72)	-45° to +81°C	-55° to +81°C

1/ Amplitude balance: Between output ports, ±0.6 dB maximum, at 25°C, ±0.7 dB maximum over operating temperature range.

REQUIREMENTS:

Design and construction: See figure 1.

Housing: Hermetically sealed.

Electrical characteristics: See table I.

Weight: See table I.

Ambient temperature: See table I.

Environmental tests: In accordance with MIL-DTL-23971 except:

Dash numbers 01 and 02:
Resistance to soldering heat: Immersion to within 0.03 inch maximum from header.
Dash number 01:
Vibration, high frequency: In accordance with method 204 of MIL-STD-202, test condition B.

Part number: M23971/11- (dash number from table I).

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

Preparing activity:
DLA - CC

(Project 5985-1227-15)

Review activities:
Navy - AS, MC, OS