TMC SPECIFICATION NO. S10191-1

J. G. Parkin TITLE: AMC-21B Individual Equipment Specification

Number of Outputs: From 2 to 16 in increments of 2

Frequency Range: 100 KHz to 32 MHz

Input and Output Impedance: Either 50 ohms or 75 ohms (fixed) with a

VSWR better than 1.5:1 (filter out)

Insertion Gain: $2 db \pm 1 db$

Desensitization A 100 uv signal at 25 MHz is compressed by

3 db max. when a 2V RMS signal between

JOB

2 to 6 MHz is applied simultaneously.

Noise Figure: 7 db maximum

Intermodulation: Second and third order products better than

60 db below two half-volt (open circuit)

signals within the operating range.

Isolation: Better than 50 db output-to-input

Better than 60 db output-to-output

Phase correlation: ± 1° between outputs

Power supply: 115V or 220V AC 50/60 Hz. Power con-

sumption approximately 25 watts (16 outputs)

Dimensions: Height - 3 1/2"

Width: - 19"
Depth - 14"

Weight: 25 lb. approximately

MTBF: Better than 20,000 hours as per RADC

Handbook

The AMC-21B Multicoupler is a commercial unit designed to TMC specifications and current acceptable engineering practice.

SH. 1 OF 2

COMPILED BY
J. G. Parkin

TMC

SPECIFICATION NO. S10191-2

TITLE: AMC-8 Individual Equipment Specification

JOB

APPROVED

Number of Outputs:

Eight

Frequency Range:

2 MHz to 32 MHz

Input and Output Impedance:

75 ohms with a VSWR better than 1.5:1

Insertion Gain:

 $2 db \pm 0.5 db$

Desensitization:

100 uv signal at 25 MHz is compressed by 3 db maximum when an 8 V peak-to-peak signal between 2 to 6 MHz is applied

simultaneously

Off-band rejection:

-30 db minimum from dc to 1.4 MHz and

from 46 MHz to 1 GHz

Noise figure:

7 db maximum

Intermodulation:

With two 0.5 volts rms input signals (refer-

enced to 75 ohms)

2nd order products, -65 db 2 to 20 MHz -60 db 20 to 30 MHz

3rd order products, -70 db 2 to 30 MHz

Isolation:

-40 db minimum, output-to-output -55 db minimum, output-to-input

Phase correlation:

± 2 degrees between any two outputs

Line filters:

-40 db minimum attenuation, 14 KHz to

150 MHz

Power Supply:

115 v \pm 6%, 48/62 Hz, power consumption

approximately 20 watts.

Dimensions:

Width - 19 inches Height - 1-3/4 inches Depth - 14 inches

Weight:

8 pounds approximately

MTBF:

20,000 hours average operational life

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TMC

SPECIFICATION NO. S10191-2

COMPILED BY TITLE: AMC-8 Individual Equipment Specification J. G. Parkin

JOB

APPROVED :

Temperature Range:

Class 4 military requirements, operating 0° to 50°C

non-operating -62° to +75°C

Humidity:

Operational up to 95%

The AMC-8 Multicoupler has been designed to meet all requirements for military use as defined in MIL-E-16400F, and SHIPS-C-4297 (as amended by RCA Document A1815402).

DATE 24 Jul 69 SPECIFICATION NO. S10191-3 TMC \mathbf{SH} . 1 of 2 COMPILED BY TITLE: AMC-32 Individual Equipment Specification J. G. Parkin APPROVED 32 Number of Outputs: Frequency Range: 2 to 32 MHz 75 ohms with a VSWR better than 1.5:1 Input and Output Impedance: $2 db \pm 1 db$ Insertion Gain: 100 uv signal at 25 MHz is compressed by Desensitization: 3 db maximum when an 8v peak-to-peak signal between 2 to 6 MHz is applied simultaneously. 7 db maximum Noise Figure: With two 0.5 volts rms input signals Intermodulation: (referenced to 75 ohms) 2nd order products are: (1) -60 db when both input signals and the product signal are between 2 to 20 MHz; (2) -55 db when either or both input signals or the product signal are above 20 MHz. 3rd order products are: (1) -65 db when both input signals and the product signal are between 2 to 25 MHz; (2) -60 db when either or both input signals or the product signal are above 25 MHz. -40 db, minimum, output-to-output Isolation: -55 db, minimum, output-to-input -40 db minimum attenuation between 14 KHz Line Filters: to 150 MHz Power Supply: 115 vac \pm 6% 48/62 Hz; power consumption approximately 80 watts

17 pounds approximately

Width - 19 inches

Height - 3-1/2 inches Depth - 16 inches

Dimensions:

Weight:

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TMC

SPECIFICATION NO. S 10191-3

COMPILED BY J. G. Parkin

TITLE: AMC-32 Individual Equipment Specification

JOB

APPROVED

MTBF:

20,000 hours as per RADC reliability

handbook

Temperature Range:

Class 4 military requirements

Operating: 0° to +50°C

Non-operating: -62° to +75° C

Humidity:

Operational up to 95%

The AMC-32 Multicoupler has been designed to meet all requirements for military use as defined in MIL-E-16400F and SHIPS-C-4297 (as amended by RCA Document A1815403).

DATE 24 Jul 69 TMC SPECIFICATION NO. S10191-5 SH. 1 OF $\frac{1}{2}$ COMPILED BY JOB TITLE: MAC-1 Individual Equipment Specification J. G. Parkin APPROVED Number of Inputs: Eight Number of Outputs: One 2 MHz to 32 MHz Frequency Range: Input and Output Impedance: 75 ohms with a VSWR better than 1.5:1 Insertion Gain: $2 db \pm 1 db$ Desensitization: 100 uv signal at 25 MHz is compressed 3 db maximum when an 7v peak-to-peak signal between 2 to 6 MHz is applied simultaneously 16 db maximum Noise Figure: Phase Correlation: ± 20 between inputs Intermodulation: second and third order products better than 65 db below two half-volt (referenced to 75 ohms) signals applied within the operating range Isolation: 40 db input-to-input 55 db output-to-input Line Filters: 40 db attenuation between 14 KHz and 150 KHz $115V \pm 6\%$, 48/62 Hz; power consumption Power Supply: approximately 30 watts Dimensions: Width - 19 inches Height - 3-1/2 inches Depth - 16 inches Weight: 16 pounds approximately MTBF: 20,000 hours as per RADC handbook Operating 0° to +50°C Temperature Range: Non-operating -60° to +75°C Humidity: Operation to 95%RH The MAC-1 multiantenna coupler has been designed to meet all requirements

for military use as defined in MIL-E-16400F and SHIPS-C-4297 (as amended

by RCA Document A1815404).

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