

DATE July 24/68

SH. _____ OF _____

COMPILED BY

TMC SPECIFICATION NO. S10163

TITLE: PREPRODUCTION INSPECTION FOR EIGHT-JOBAPPROVED *[Signature]*

OUTPUT MULTICOUPLERS

- References: (1) MIL-E-16400D (NAVY) para. 4.3
 (2) SHIPS-C-4297

Preproduction inspection for eight-output multicouplers shall include the following tests:

<u>Subject</u>	<u>Reference</u>	<u>Paragraph</u>	<u>TMC Specification</u>
Surface examination	(1)	4.5.1	S10166-1
Operating Test	(1)	4.5.2 (as specified SHIPS-C-4297 para 4.3.1 operating tests shall include the following:	
Input and Output Impedance	(2) RCA Victor A1815402 para 3.1)	3.2.4 (amended by 3.3.1	S10166-2
Input filter	(2)	3.3.1	S10166-3
Gain for each output	(2)	3.3.2 @ 2.5, 8, 16, 28 MHz	S10166-4
Overload	(2)	3.3.3	S10166-5
Radiation	(2)	3.3.4	S10166-6
Cross-talk isolation	(2)	3.3.5	S10166-7
Spurious responses	(2)	3.3.6	S10166-8
Noise figure	(2)	3.3.7	S10166-9
Power input filter	(2)	3.3.8	S10166-10
Phase shift (single coupler)	(2)	3.3.9	S10166-11
Weights and dimensions	(1)	4.5.3	S-10166-12
Supply line voltage and frequency	(1)	4.5.4	S10166-13
Heat test	(1)	4.5.6	S10166-15
Temperature	(1)	4.5.8	S10166-17
Humidity	(1)	4.5.9	S10166-18
Power	(1)	4.5.10	S10166-19
Controls and control circuits	(1)	4.5.13	S10166-22
Accelerated life test	(1)	4.5.14	S10166-23
Shock, vibration, and inclination	(1)	4.5.15 (not required as per SHIPS-C-4297 para 4.3)	
Salt spray test	(1)	4.5.16 (not required as per RCA Victor A1815402 para 3.5)	
Reliability	(1)	4.5.18 (as amended by RCA Victor A1815402 para 3.4)	S10166-24

DATE Nov. 23/67
SH. OF

COMPILED BY

TMC SPECIFICATION NO. S 10163

TITLE PREPRODUCTION INSPECTION FOR EIGHT OUTPUT

JOB

APPROVED

M.W.H.
MULTICOUPLERS

TEST RESULTS

- S10166-1 Surface examination :
examination _____
- S10166-2 Input and Output Impedance:
1.5:1 V.S.W.R. maximum _____
- S10166-3 Input filters:
-30db minimum _____
- S10166-4 Voltage gain:

- S10166-5 Overload:

- S10166-6 Radiation:
55db attenuation minimum _____
- S10166-7 Crosstalk isolation:
40db attenuation minimum _____
- S10166-8 Spurious responses:

- S10166-9 Noise figure:
7db maximum _____
- S10166-10 Power input filters:
40db attenuation minimum _____
- S10166-11 Phase characteristics:
 ± 2 degrees phase difference
maximum _____
- S10166-12 Weights and dimensions:
Examination _____
- S10166-13 Supply line voltage and frequency:
Limits: Voltage - lower 108 volts
upper 122 volts _____
Frequency - lower 48 cycles
upper 62 cycles _____

DATE Nov. 23/67

SH. _____ OF _____

COMPILED BY

J. K.

TMC SPECIFICATION NO. S 10163

TITLE: PREPRODUCTION INSPECTION FOR EIGHT-OUTPUT

JOB

APPROVED

MULTICOUPLERS

SI0166-15	Heat:	no leakage	_____
SI0166-17	Temperature:	no internal alignment or adjustment	_____
SI0166-18	Humidity:	Performance Examination	_____
SI0166-19	Power:	Consumption Power factor	_____
SI0166-22	Controls and control circuits:	Examination	_____
SI0166-23	Accelerated life:	Performance	_____
SI0166-24	Reliability:	Report attached	_____