PRODUCTION TEST PROCEDURE

FOR

DIODES

353-9012-010

TO BE MATCHED INTO PAIRS

COLLINS RADIO COMPANY

CEDAR RAPIDS, IOWA

TM- 3954

Page __1__ of __1__ Cover Sheet Section

DATE	REV. NO.	REVISED BY	APPROVED BY	REVISED PAGE NUMBERS
2/20/74	0	*C.E. Frantz*	*J.W. Pelton*	Original

1.0 SCOPE

THIS PRODUCTION TEST PROCEDURE APPLIES TO JAN IN82 AG DIODES, 353-9012-010, THAT MUST BE MATCHED PAIRS FOR USE IN DIRECTIONAL COUPLERS, WATTMETERS, ETC.

2.0 REFERENCE INFORMATION

2.1 SPECIFICATIONS

JAN IN82 AG DIODE 353-9012-010

2.2 DRAWINGS

DIODE MATCHING TEST FIXTURE SCHEMATIC 623-7984-001

3.0 TEST EQUIPMENT REQUIREMENTS

THE FOLLOWING EQUIPMENT OR THEIR EQUIVALENTS ARE REQUIRED TO PERFORM THE SPECIFIED TESTS:

1. SIGNAL GENERATOR HP606A
2. DIODE MATCHING TEST FIXTURE 623-7984-001

4.0 TEST CONDITIONS

4.1 POWER SUPPLY VOLTAGE, FREQUENCY, AND PHASE

NONE

4.2 TEMPERATURE, HUMIDITY, AND ATMOSPHERIC PRESSURE

PREVAILING FACTORY AMBIENT

4.3 WARM-UP PERIOD

NONE

5.0 PRELIMINARY TESTS

NONE

6.0 INITIAL ADJUSTMENTS

NONE

7.0 TEST REQUIREMENTS

CONNECT SIGNAL GENERATOR TO TEST FIXTURE. SET SIGNAL GENERATOR FOR 7MHZ. ADJUST AMPLITUDE FOR A CONVENIENT METER READING (APPROX. 25uA)

REV	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	21	22	23	24

WITH A TYPICAL DIODE PLACED IN THE LEFT TEST CLIP. DIODE POLARITY
IS MARKED ON THE TEST CLIPS. BANDED END OF DIODE IS CATHODE END.

PLACE DIODES, ONE AT A TIME, IN THE LEFT TEST CLIP AND SORT ACCORDING TO
TEST FIXTURE METER READING WITHIN .5uA. USE BOXES OR A TRAY WITH
COMPARTMENTS LABELED 24, 24.5, 25, 25.5, 26, 26.5, 27, 27.5, etc.

NEXT TAKE ONE SORTED GROUP OF DIODES AND PUT ONE DIODE IN LEFT CLIP AND
ONE DIODE IN RIGHT CLIP (OBSERVE POLARITY MARKED ON CLIPS). MATCH
DIODES IN RIGHT AND LEFT CLIPS TO WITHIN .5uA (NMT .5uA). AS PAIRS
OF DIODES ARE MATCHED, TAPE ONE END OF THE LEADS TOGETHER WITH MASKING
TAPE.

ANY DIODES THAT CANNOT BE MATCHED CAN BE RETAINED UNTIL THE NEXT TIME A
BATCH OF DIODES ARE TO BE MATCHED.

8.0   <u>DATA SHEET REQUIREMENTS</u>

NONE

Page __2__ of __2__ Procedure/XXXXX Section

REV	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Page __3__ of __3__