PRODUCTION TEST PROCEDURE

FOR

DIODES

353-9012-010

TO BE MATCHED INTO PAIRS

COLLINS RADIO COMPANY

CEDAR RAPIDS, IOWA

TM- 3954
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. 25μA)
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 DATA SHEET REQUIREMENTS

NONE