

**TITLE: ENGINEERING CONTROL DRAWING.**

**PART IDENTIFIER:** HE298MF REV B

**DESCRIPTION:** NON MAGNETIC HYBRID COUPLER ROHS COMPLIANT

**ASSEMBLY DWG:** HE298MF

**1.0 SPECIFICATIONS:**

**1.1 ELECTRICAL:**

- 1.1.1 CHARACTERISTIC IMPEDANCE: 50 OHMS NOMINAL.
- 1.1.2 FREQUENCY: 293 MHz TO 303 MHz
- 1.1.3 INSERTION LOSS: 0.17 dB MAX
- 1.1.4 VSWR: 1.07:1 MAX
- 1.1.5 AMPLITUDE BALANCE: ±0.1 dB MAX
- 1.1.6 PHASE BALANCE: ±1°
- 1.1.7 ISOLATION: 35 dB MIN.
- 1.1.8 POWER RATING: 300 WATTS.
- 1.1.9 PHASE TABLE:

PORTS	J1	J2	J3	J4
J1	-	ISO	-90°	0°
J2	ISO	-	0°	-90°
J3	-90°	0°	-	ISO
J4	0°	-90°	ISO	-

**1.2 MECHANICAL:**

- 1.2.1 OUTLINE DWG: SEE SHEET 2,
- 1.2.2 WORKMANSHIP: PER MIL-HDBK-454 GUIDLINE 9.

**1.3 ENVIRONMENTAL:**

- 1.3.1 OPERATING TEMPERATURE RANGE: -55°C TO +85°C.
- 1.3.2 NON-OPERATING TEMPERATURE RANGE: N/A

**2.0 UNIT MARKING:** FLORIDA RF LABS LOGO, HYBRIX AND HE298MF. LEGIBILITY AND PERMANENCY PER MIL-STD-130.

**3.0 QUALITY ASSURANCE:**

**3.1 SAMPLE INSPECT PER MIL-STD-105, LEVEL II, 1.0% AQL.**

- 3.1.1 MAGNETISM TEST PER 751W356.
- 3.1.2 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DRAWING REQUIREMENTS.
- 3.1.3 MEASURE AMPLITUDE BALANCE AND VSWR.
  - 3.1.2.1 ACCEPTANCE LIMITS: PER 1.1.5 AND 1.1.4.

**3.2 TEST DATA REQUIREMENTS:**

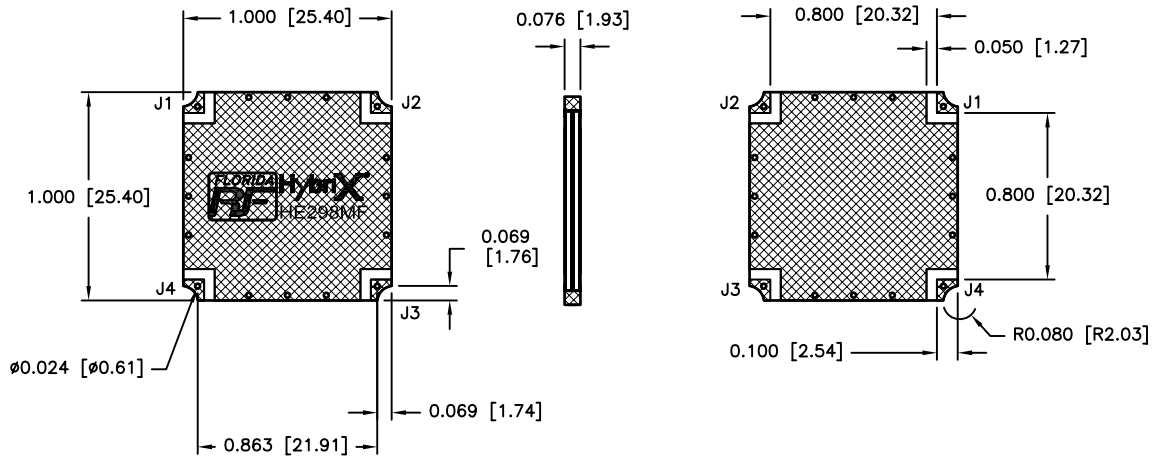
- 3.2.1 NO TEST DATA REQUIRED FOR CUSTOMER.
- 3.2.2 DATA RETENTION - 12 MONTHS

**4.0 PACKAGING:** PER 755W002, MARK CONTAINER(S) WITH THE FOLLOWING:  
VENDOR CODE (2Y194)  
LOT AND DATE CODES.

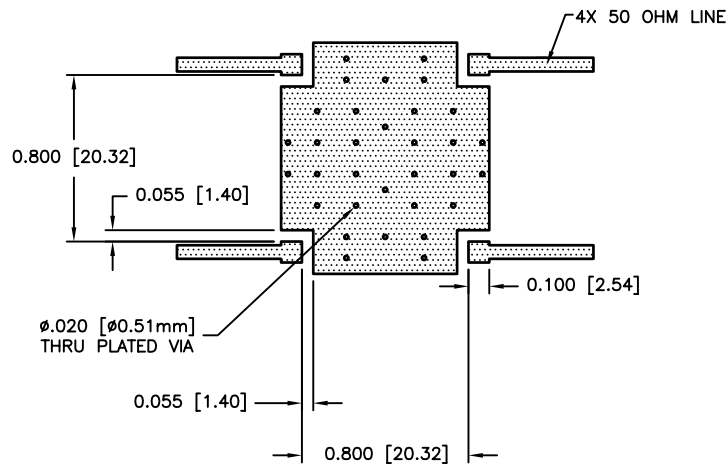
<b>FLORIDA RF LABS</b> <b>8851 SW OLD KANSAS AVE.</b> <b>STUART, FL 34997</b>	<b>CAGE CODE # 2Y194</b>		<b>DWG #</b>	HE298MF
	<b>CHANGE NOTICE</b>	<b>10-1067</b>	<b>REV LVL</b>	B
			<b>SHEET</b>	1 OF 2

TOP SIDE

BOTTOM SIDE




\* DEVICE TO BE MOUNTED WITH PART MARKING FACING UP. WITH LEFT-TO-RIGHT READING, CLOCKWISE FROM TOP-LEFT, PORTS ARE LABELED J1, J2, J3, J4. DEVICE IS DESIGNED TO BE SYMMETRICAL



SUGGESTED BOARD MOUNTING

\* 100% SOLDER COVERAGE ON GROUND AND I/O FOR PROPER RF AND THERMAL PERFORMANCE.  
 \* INCREASE NUMBER OF VIAS FOR THERMAL PATH.

 8851 SW OLD KANSAS AVE STUART, FL 34997 PHONE NO. (772)286-9300 FAX NO. (772)283-5286	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES <b>TOLERANCES</b> FRACT ±1/16 ANG ±5° XX ±0.01 XXX ±0.005 XXXX ±0.0005	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF EMC TECHNOLOGY INC AND SHALL NOT BE DUPLICATED OR USED AS BASIS FOR THE MANUFACTURE OR SALE OF PARTS OR DEVICES WITHOUT PERMISSION.				
	<b>CAGE CODE</b> 2Y194	<b>SCALE</b> N/A	<b>DRAWN BY</b> CRH 07/12/10	<b>CHECKED BY</b>	<b>APPROVED BY</b>	
	<b>REV</b> B	<b>CHANGE NOTICE</b> EN 10-1067	<b>DRAWING NO</b> HE298MF	<b>SHEET</b> 2 OF 2		