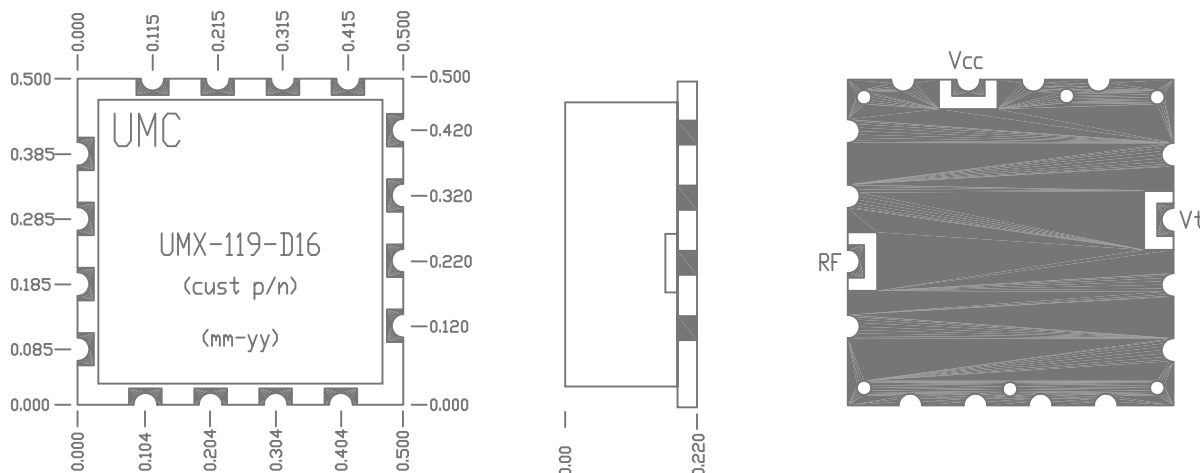


| REVISIONS |     |             |      |          |
|-----------|-----|-------------|------|----------|
| ZONE      | REV | DESCRIPTION | DATE | APPROVED |
|           |     |             |      |          |

|                              |                       |
|------------------------------|-----------------------|
| Operating Temperature Range  | -40 to +85 degrees C  |
| Storage Temperature Range    | -55 to +125 degrees C |
| Vcc Voltage, Vdc             | +9                    |
| Vtune Voltage, Vdc           | +12                   |
| DC Voltage applied to RF out | +/- 25                |

TABLE 1.1, ABSOLUTE MAXIMUM RATINGS



ALL DIMENSIONS IN INCHES

| Contact Assignments:          |  |
|-------------------------------|--|
| 1: RF Out                     |  |
| 2: Vcc                        |  |
| 3: V-tune                     |  |
| All other contacts are Ground |  |

TABLE 1.2, CONTACT ASSIGNMENTS

|   |  |          |                   |          |
|---|--|----------|-------------------|----------|
| Unless otherwise specified,<br>dimensions are in inches<br>File = /P119/SOURCE/SCD1.DWG | Universal Microwave Corp.                |          |                   |          |
|   | SPECIFICATION CONTROL<br>FOR UMX-119-D16 |          |                   |          |
| Prepared by: Jan Adams    Date: 02-18-02  | SIZE<br>A                                | FSCM NO. | DWG NO.<br>UP-119 | REV<br>X |
|   | SCALE                                    |          | SHEET             |          |

| REVISIONS |     |             |      |          |
|-----------|-----|-------------|------|----------|
| ZONE      | REV | DESCRIPTION | DATE | APPROVED |
|           |     |             |      |          |

|                                      | MIN. | TYP. | MAX. |
|--------------------------------------|------|------|------|
| Frequency, MHz                       | --   | 1600 | --   |
| Power Output, dBm                    | -2   | 0    | +2   |
| Harmonics, dBc                       | --   | -15  | -10  |
| SSB Phase Noise, dBc/Hz              |      |      |      |
| @ Offset = 1kHz                      | --   | -95  | -91  |
| @ Offset = 10kHz                     | --   | -123 | -118 |
| @ Offset = 100kHz                    | --   | -143 | -138 |
| @ Offset = 1MHz                      | --   | -163 | -158 |
| @ Offset = 10MHz                     | --   | -164 | -159 |
| Pushing, MHz/V                       | --   | 0.2  | 0.3  |
| Pulling, MHz p-p, @12dBm, all phases | --   | 1    | 1.5  |
| Tuning Voltage, Vdc                  | 2    |      | 10   |
| Tuning Sensitivity, MHz/V            | --   | 4    | --   |
| Frequency drift with temperature     |      |      |      |
| @ -40 degrees C, MHz                 | --   | 1    | 2    |
| @ +85 degrees C, MHz                 | --   | 1    | 2    |
| Supply Voltage, Vdc                  | --   | 8    | --   |
| Supply Current, mAdc                 | --   | 25   | --   |
| Output Power @ Vtune = 0 and 10V     | -2   | --   | --   |
| Tuning Port Capacitance, pF          | --   | 47   | --   |
| 3dB Modulation Bandwidth, kHz        | --   | 1000 | --   |

TABLE 1.0, ELECTRICAL SPECIFICATIONS

|  |   |          |                   |          |
|--|---|----------|-------------------|----------|
| Unless otherwise specified,<br>dimensions are in inches<br>File = /P119/SOURCE/SCD.DWG | <h1 style="margin: 0;">Universal Microwave Corp.</h1>                 |          |                   |          |
|  | <h2 style="margin: 0;">SPECIFICATION CONTROL<br/>FOR UMX-119-D16</h2> |          |                   |          |
| Prepared by: Jan Adams    Date: 02-18-02   | SIZE<br>A   | FSCM NO. | DWG NO.<br>UP-119 | REV<br>X |
| Universal Microwave Corporation<br>2339 Destiny Way<br>Odessa, FL 33556                | SCALE   | SHEET    |                   |          |