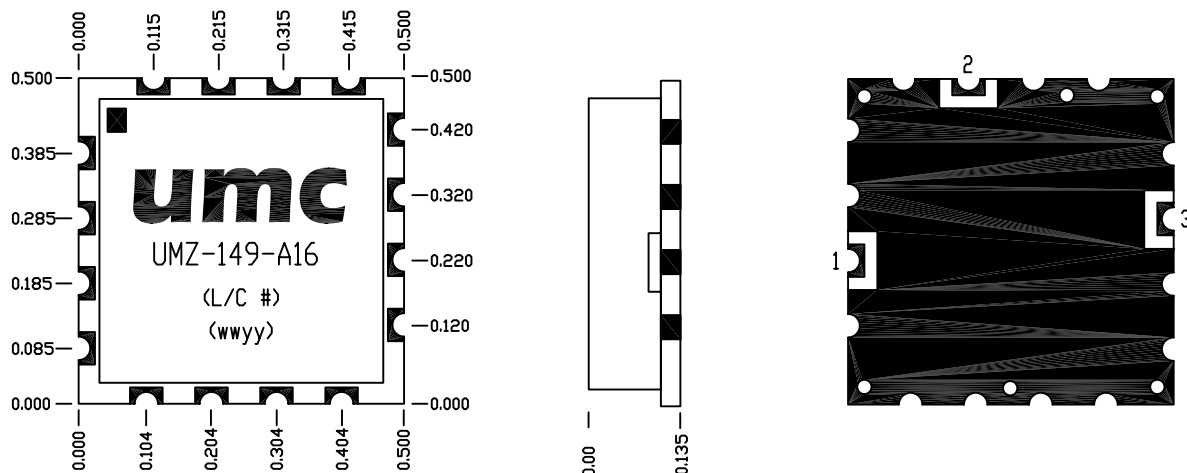




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TABLE 1.1, ABSOLUTE MAXIMUM RATINGS

|                              |                       |
|------------------------------|-----------------------|
| Operating Temperature Range  | -40 to +85 degrees C  |
| Storage Temperature Range    | -55 to +125 degrees C |
| Vcc Voltage, Vdc             | +5.5                  |
| Vtune Voltage, Vdc           | +5.0                  |
| DC Voltage applied to RF out | +/- 25                |



ALL DIMENSIONS IN INCHES

TABLE 1.2, CONTACT ASSIGNMENTS

|                               |  |
|-------------------------------|--|
| CONTACT ASSIGNMENTS:          |  |
| 1: RF OUT                     |  |
| 2: SUPPLY INPUT               |  |
| 3: TUNING VOLTAGE INPUT       |  |
| ALL OTHER CONTACTS ARE GROUND |  |

Unless otherwise specified,  
dimensions are in inches  
TOLERANCES  
.X =+/- .1  
.XX =+/- .01  
.XXX =+/- .005  
ANG =+/- 2°  
Universal Microwave Corporation  
Proprietary Information  
Prepared by: A.BYRD 9/8/05  
Engineer:  
Universal Microwave Corporation  
2339 Destiny Way  
Odessa, FL 33556

Universal Microwave Corp.

SPECIFICATION CONTROL  
DRAWING FOR UMZ-149-A16

|           |          |                   |          |
|-----------|----------|-------------------|----------|
| SIZE<br>A | FSCM NO. | DWG NO.<br>UP-149 | REV<br>A |
| SCALE N/A |          | SHEET 1 OF 2      |          |

|   | MIN. | TYP. | MAX. |
|---|------|------|------|
| Frequency, MHz                                    | 300  |      | 345  |
| Power Output, dBm                                 | +1.0 | +3.0 | +5.0 |
| Harmonics, dBc                                    |      | -20  | -15  |
| SSB Phase Noise, dBc/Hz:                          |      |      |      |
| @ Offset = 1kHz                                   |      | -75  | -70  |
| @ Offset = 10kHz                                  |      | -100 | -95  |
| @ Offset = 100kHz                                 |      | -120 | -115 |
| @ Offset = 1MHz                                   |      | -140 | -135 |
| @ Offset = 10MHz                                  |      | -160 | -150 |
| Pushing, MHz/V                                    |      | 1    | 2    |
| Pulling, MHz p-p, @12dB <sub>r</sub> , all phases |      | 1    | 5    |
| Tuning Voltage, Vdc                               | +0.5 |      | +4.5 |
| Tuning Sensitivity, MHz/V                         |      | 18   |      |
| Frequency drift with temperature:                 |      |      |      |
| @ -40°C, MHz                                      |      | 1    | 3    |
| @ +85°C, MHz                                      |      | 1    | 3    |
| Supply Voltage, Vdc                               |      | +5.0 |      |
| Supply Current, mA                                |      | 15   |      |
| Output Power @ $V_t = 0$ and 5V                   | 0    |      |      |
| Tuning Port Capacitance, pF                       |      | 100  |      |
| 3dB Modulation Bandwidth, kHz                     |      | 100  |      |

TABLE 1.3 ELECTRICAL SPECIFICATIONS

|                                      |   |              |   |
|--------------------------------------|---|--------------|---|
| <b>SPECIFICATION CONTROL DRAWING</b> |   |              |   |
| Drawing No. UMZ-149-A16              |   |              |   |
| Size                                 | A | REV          | A |
| Engineer: T.KRAUS 9/8/05             |   | SHEET 2 OF 2 |   |