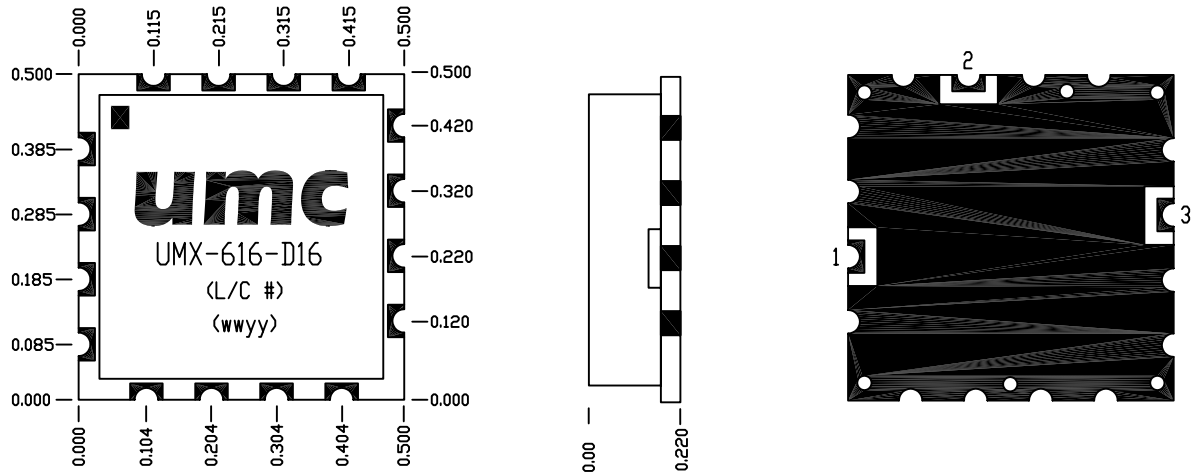




CONFIDENTIAL

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 | +9.0 |
| 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 =+/-0.1
 .XX =+/-0.01
 .XXX =+/-0.005
 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 UMX-616-D16

| | | | |
|-----------|----------|-------------------|----------|
| SIZE A | FSCM NO. | DWG NO. UP-616 | REV A |
| SCALE N/A | | SHEET 1 OF 2 | |

| | MIN. | TYP. | MAX. |
|---|------|------|------|
| Frequency, MHz | | 1456 | |
| Power Output, dBm | +5.0 | +7.0 | +9.0 |
| Harmonics, dBc | | -15 | -10 |
| SSB Phase Noise, dBc/Hz: | | | |
| @ Offset = 1kHz | | -97 | -92 |
| @ Offset = 10kHz | | -122 | -118 |
| @ Offset = 100kHz | | -142 | -138 |
| @ Offset = 1MHz | | -162 | -158 |
| @ Offset = 10MHz | | -164 | -159 |
| Pushing, MHz/V | | 0.4 | 0.8 |
| Pulling, MHz p-p, @12dB _r , all phases | | 0.5 | 1 |
| Tuning Voltage, Vdc | +0.5 | | +4.5 |
| Tuning Sensitivity, MHz/V | | 6 | |
| Frequency drift with temperature: | | | |
| @ -40°C, MHz | | 1 | 2 |
| @ +85°C, MHz | | 1 | 2 |
| Supply Voltage, Vdc | | +8.0 | |
| Supply Current, mA | | 29 | |
| Output Power @ $V_t = 0$ and 5V | +4.0 | | |
| Tuning Port Capacitance, pF | | 47 | |
| 3dB Modulation Bandwidth, kHz | | 1000 | |

TABLE 1.3 ELECTRICAL SPECIFICATIONS

| | | | |
|--------------------------------------|---|--------------|---|
| SPECIFICATION CONTROL DRAWING | | | |
| Drawing No. UMX-616-D16 | | | |
| Size | A | REV | A |
| Engineer: T.KRAUS 9/8/05 | | SHEET 2 OF 2 | |