

MTI Oscillator Specification
 Customer: BANCMM 10MHZ AT3
 Model # : 240-0530-D
 ICD # : 010185-0507

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 Updated: 6/10/2003
 Created: 6/19/1998
 See Notes on Page 3

	Note #	Comments
Frequency : 1.000000000E+007 Hz		
Initial Tolerance : $\pm$ 0.0E+000		
Crystal Cut : AT		
OT : 3		
Thermal Stability : 5.0E-007		
Temperature Range		
Minimum : -30 °C		
Maximum : 70 °C		
Aging		
Per Day : 1.0E-009		
Per Month : 0.0E+000	1	
Per Year : 3.0E-007		
Output Type : 7dBm $\pm$ 2dB Sine		
Sine		
Nominal : 7.000 dBm		
Minimum : 5.000 dBm		
Maximum : 9.000 dBm		
Harmonics : - 20 dBc		
Subharmonics : - 0 dBc	1	
Spurious : - 80 dBc		
Phase Noise @ Offsets of:		
1 Hz : - 65 dBc/Hz		
10 Hz : - 95 dBc/Hz		
100 Hz : -120 dBc/Hz		
1,000 Hz : -150 dBc/Hz		
10,000 Hz : -155 dBc/Hz		
100,000 Hz : -155 dBc/Hz		
Short Term Stability		
1 Sec : 1.0E-010		
10 Secs : 0.0E+000	1	

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	Note #	Comments
Supply Voltage Sensitivity ($\pm 5\%$)		
dF/dV : 3.0E-008		
Load Sensitivity ($\pm 5\%$)		
dF/dL : 1.0E-008		
g-Sensitivity		
dF/dG : 0.0E+000	1	
Warm Up		
Time : 10.0 Mins		
dF/F : 2.0E-008		
Reference Time : 60.0 Mins		
Retrace		
Time Off : 0.0 Hr	1	
Time On : 0.0 Hr		
Warm Up Power		
Typical : 6.000 W		
Minimum : 5.400 W		
Maximum : 6.600 W		
Continuous Power		
Typical : 1.700 W		
Minimum : 1.360 W		
Maximum : 2.040 W		
Supply Voltage		
Nominal : 13.00 V		
Minimum : 11.00 V		
Maximum : 15.00 V		
Reference Voltage		
Minimum : 7.0 V		
Maximum : 8.0 V		
Source Resistance : 2.200E+003 Ω		
Tuning Voltage		
Minimum : 0.0 V		
Maximum : 6.0 V		
Tuning Slope : Negative		
Tuning Input		
Resistance : 5.000E+005 Ω		
Bandwidth : 2.000E+002 Hz		
Tuning Linearity : 35 %		
Electrical Tuning		
Minimum : $\pm 2.0E-006$		
Maximum : $\pm 5.0E-006$		
Mechanical Tuning		
Minimum : $\pm 0.0E+000$	1	
Maximum : $\pm 0.0E+000$	1	

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Notes:

Notes:

1. Not applicable

Revision 10-20-93:

Reference voltage changed to 7.0 - 8.0V

Revision A: Changed continuous power from 1.4W to 1.7W (typo).

Revision B: Changed dF/dV from 1e-8 to 3e-8; changed warm-up
1/4/96 power from 5W to 6W; changed warm-up time from 5min
to 10min.

Revision C: Changed ICD number from ICD#010185-0501 (STD with
05-09-97 mechanical tuning) to ICD#010185-0507 (with
electrical tuning only); Change initial
tolerance from 5.0E-1 to 0.

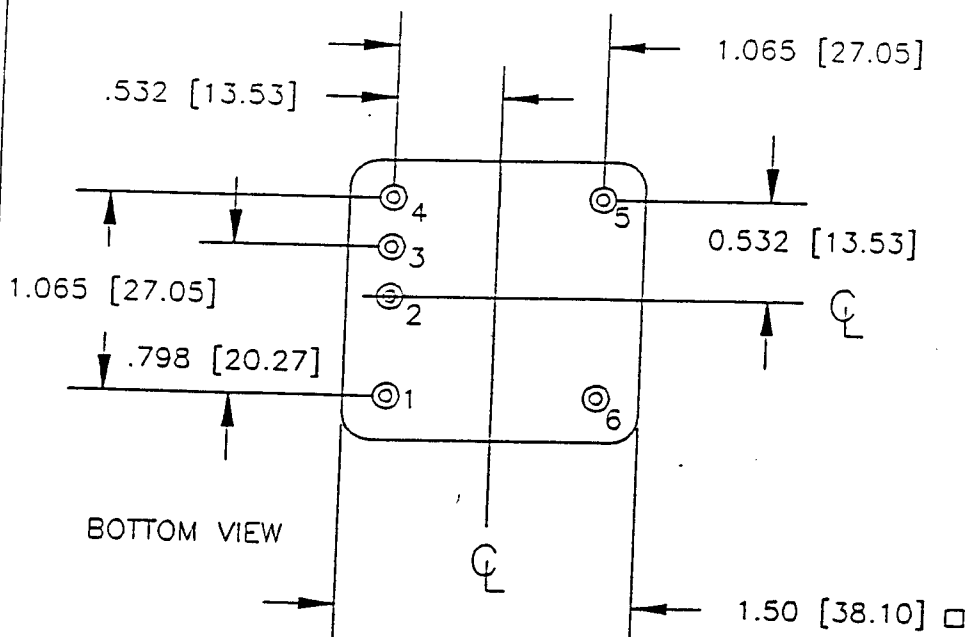
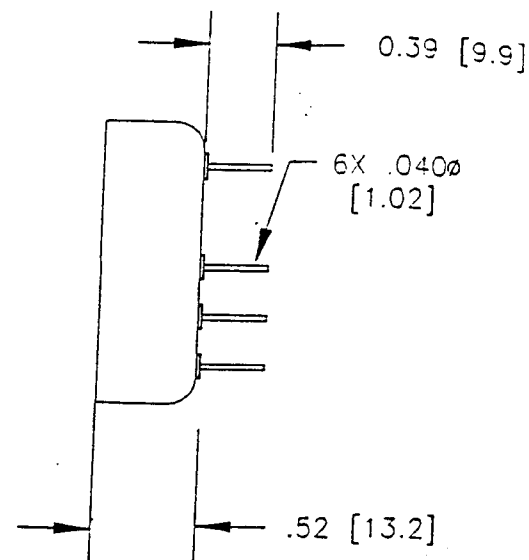
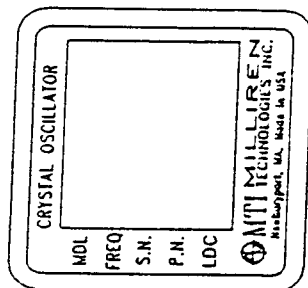
Revision D: Clarified output 7dBm $\pm$ 2dB Sine
Nominal: +7dBm
Min : +5dBm
Max : +9dBm

Supply Voltage: Nominal from 0.000V to 13.0V

Tuning Resistance: 0.000E+000 Ω to:5.000E+005 Ω

Tuning Bandwidth: 0.000E+000Hz to 2.000E+002Hz
06-19-98

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	Initial release	7-29-93	BTM



Pin Assignments	
NUM	FUNCTION
1	ELEC TUN IN
2	REF VOLT OUT
3	RF OUTPUT
4	RF RET, GND
5	B+ SUPPLY
6	N/C

INTERFACE CONTROL DRAWING

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DIMENSIONS IN INCHES UNLESS SPECIFIED		TOLERANCES		DFT BTM		DATE 7-29			
QXX DEC.	* .015	QXXX DEC.	* .010	CHK	MV	7-29			
FRACTIONS		ANGLES		ENG	BTM	7-29		TITLE OSCILLATOR QUARTZ	
MATERIAL		FINISH		MFG				SIZE A	FSCN NO. --
APPLICATION		QTY		QA				deg no.	010185-0507
						scale N/A		REV A	
								SHEET	1 of 1