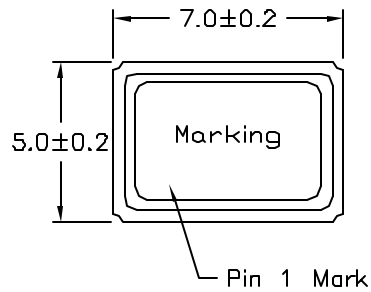


REVISIONS

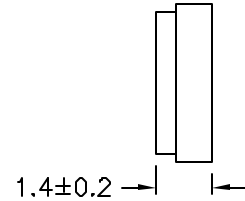
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2022	A	RELEASED	JN	1/07/09	JWM	1/07/09	JWM	1/07/09



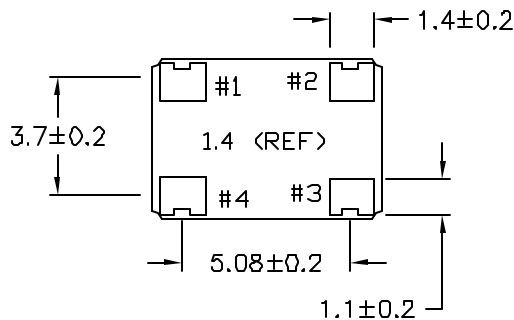
TOP VIEW



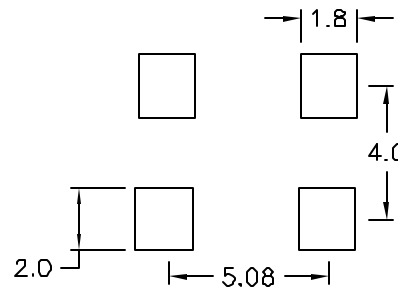
SIDE VIEW



BOTTOM VIEW



RECOMMENDED SOLDERING PATTERN



1. GENERAL

Oscillation Mode	AT, Fundamental
Storage Temperature	from -55 to +125 °C
Operable Temperature	from -20 to +70 °C

2. ELECTRICAL PERFORMANCE

Frequency Stability	±100 ppm overall from -20 to +70 °C
Voltage Change Tolerance	± 3 ppm
Supply Current	45.0 mA max.
Transition Time	Rise Time 6.0 ns max. Fall Time 6.0 ns max.
Start Time	10.0 ms max.
Symmetry or Duty Cycle	45 / 55 % at 1/2 VDD
Output Waveform	CMOS
Output Voltage	V <sub>OH</sub> : 90% V <sub>DD</sub> min V <sub>OL</sub> : 10% V <sub>DD</sub> max
Aging	±3ppm/first year

PIN#	FUNCTION
1	3-STATE
2	GND
3	OUTPUT
4	VDD

DISCLAIMER:  
ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

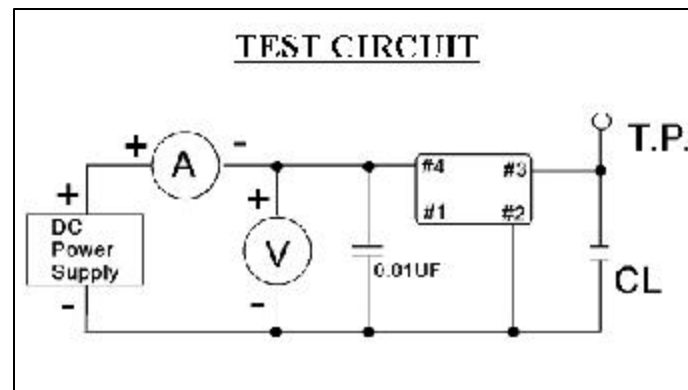
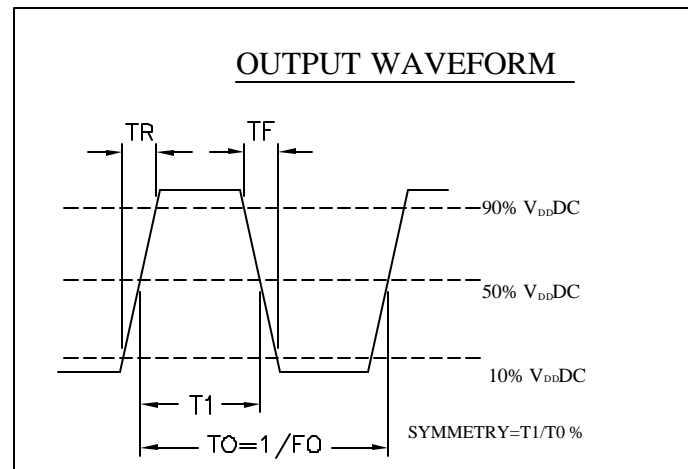
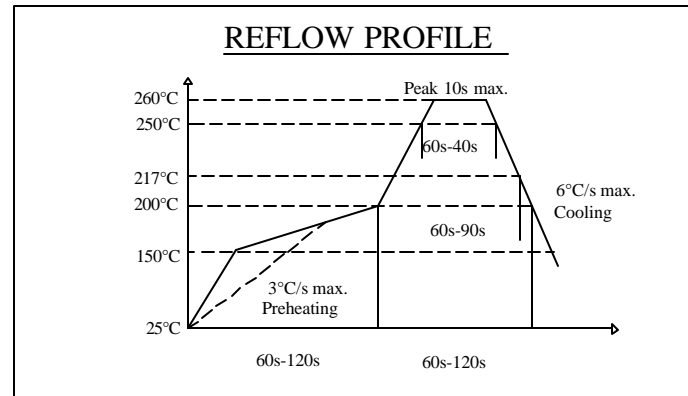
TOLERANCES:  
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jason Nash	1/07/09
CHECKED BY:	DATE:
Jeff McVicker	1/07/09
APPROVED BY:	DATE:
Jeff McVicker	1/07/09

DRAWING TITLE: <b>Oscillator</b>			
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	Ta-1080	Ta-1080.dwg	A
SCALE: NTS	U.O.M.: INCHES [mm]	SHEET: 1 OF 3	

**PHYSICAL & ENVIRONMENTAL PARAMETERS:**

No	DESCRIPTION	CONTENTS	Requirements
1	Vibration	10~55Hz 0.75mm amplitude, in 3 directions duration of 30 minutes.	No mechanical damage and the measured values shall meet electrical parameters.
2	Random Dropping	The crystal will be test by natural dropping to 30mm wooden broad 3 times from high of 30 cm.	
3	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at $260 \pm 5$ for $10 \pm 0.5$ sec.	At least 95% of the terminal surface shall be coated by the solder
4	Resistance Solder Heat	Dipped the terminals up to 2 mm into the solder bath ( $260 \pm 5^\circ\text{C}$ ) for 3 sec, placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.
5	Thermal Shock	Temperature cycling from $-20^\circ\text{C}$ (30mins) to $+70^\circ\text{C}$ (30mins) was performed 3 times, then placed in a natural condition for 2 hours.	
6	Life Test (High Temperature)	Placed in a chamber ( $70 \pm 2^\circ\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	
7	Life Test (Low Temperature)	Placed in a chamber ( $-20 \pm 2^\circ\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	
8	Humidity	Placed in a chamber (Humi: 90~ 95% RH, Temp: $40 \pm 2^\circ\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	



ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

SIZE  
A

DWG. NO.

Ta-1080

ELECTRONIC FILE  
Ta-1080.dwg

REV  
A

Mfg. P/N	Nominal Frequency	Supply Voltage	Fanout
MCOT7100003V30000RA	10.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7100003V30000RS	10.000 MHz	3.3 V $\pm$ 10%	CMOS/15PF
MCOT7160003V30000RA	16.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7184323V30000RA	18.432 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7200003V30000RA	20.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7245763V30000RA	24.576 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7270003V30000RA	27.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7327683V30000RA	32.768 MHz	3.3 V $\pm$ 10%	CMOS/15PF
MCOT7040003V30000RA	4.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7480003V30000RA	48.000 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7666663V30000RA	66.666 MHz	3.3 V $\pm$ 10%	CMOS/30PF
MCOT7018435V00000RA	1.8432 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7100005V00000RA	10.000 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7147455V00000RA	14.7456 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7160005V00000RA	16.000 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7200005V00000RA	20.000 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7250005V00000RA	25.000 MHz	5.0 V $\pm$ 10%	CMOS/50PF
MCOT7040005V00000RA	4.000 MHz	5.0 V $\pm$ 10%	CMOS/50PF