

REVISIONS

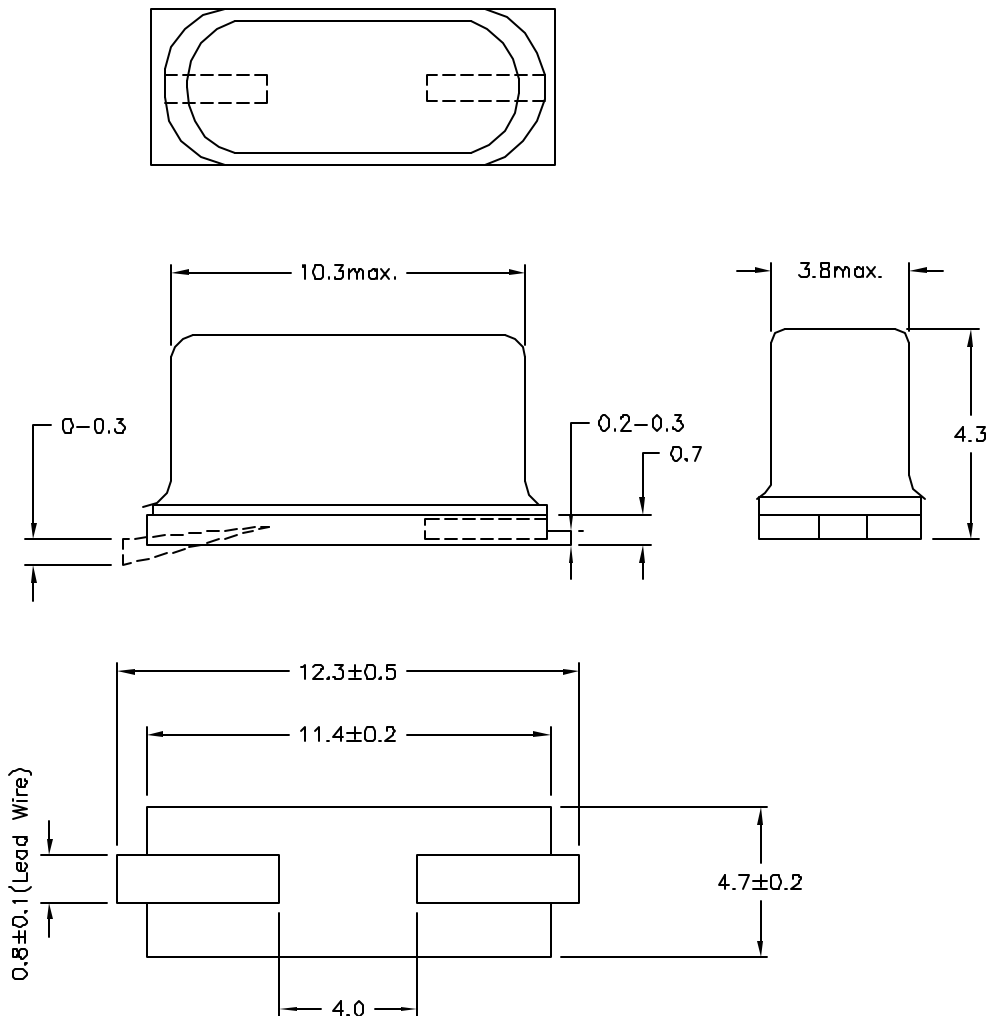
DOC. NO. SPC-F008 * Effective: 7/8/02 * DCP No: 1308

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



PARAMETERS:

No	DESCRIPTION	CONTENTS
1	Holder Type	49US-SMD
2	Oscillation Mode	AT-FUND
3	Load Capacitance	18 pF
4	Frequency Tolerance at 25°C±3°C	±30 ppm
5	Frequency Tolerance in Operating Temperature Range	±30 ppm
6	Operating Temperature Range	-40°C ~ +85°C
7	Storage Temperature Range	-40°C ~ +85°C
8	Drive Level	≤ 50 μW
9	Shunt Capacitance	≥ 5.0 pF
10	Insulation Resistance	≥ 500M Ω
11	Test Impedance Meter	KH1200
12	Aging	±3ppm/Year



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

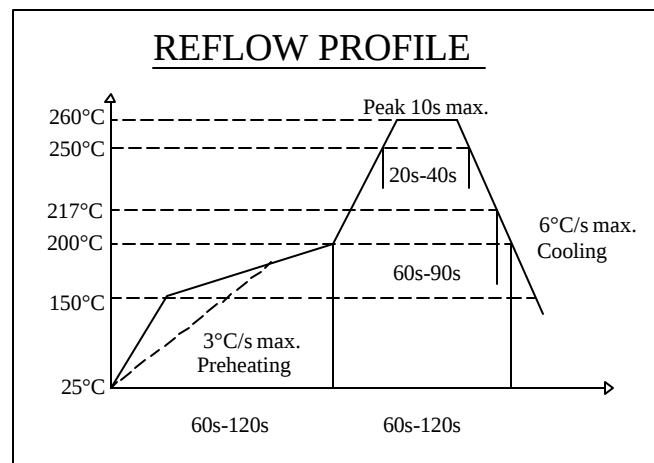
DRAWING TITLE:

Crystal Resonator

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	Ta-1081	Ta-1081.dwg	A
SCALE: NTS	U.O.M.: INCHES [mm]	SHEET: 1	OF 2

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 board 3 times from high of 30 cm.	
3	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at 260 ±5 for 10 ± 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 ±5°C) for 3 sec, placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.
5	Thermal Shock	Temperature cycling from -40°C (30mins) to +85°C (30mins) was performed 3 times, then placed in a natural condition for 2 hours.	
6	Life Test (High Temperature)	Placed in a chamber (85 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	
7	Life Test (Low Temperature)	Placed in a chamber (-40 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	
8	Humidity	Placed in a chamber (Humi: 90~ 95% RH, Temp: 60 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	



Mfg. P/N	Nominal Frequency	Equivalent Series Resistance
MCRSD03686F183000RR	3.6864 MHz	≤ 200 Ω
MCRSD04000F183000RR	4.000 MHz	≤ 150 Ω
MCRSD04194F183000RR	4.194304 MHz	≤ 150 Ω
MCRSD04915F183000RR	4.9152 MHz	≤ 150 Ω
MCRSD05000F183000RR	5.000 MHz	≤ 100 Ω
MCRSD06000F183000RR	6.000 MHz	≤ 100 Ω
MCRSD07372F183000RR	7.3728 MHz	≤ 100 Ω
MCRSD08000F183000RR	8.000 MHz	≤ 100 Ω
MCRSD09830F183000RR	9.8304 MHz	≤ 100 Ω
MCRSD12000F183000RR	12.000 MHz	≤ 80 Ω
MCRSD14745F183000RR	14.7456 MHz	≤ 50 Ω
MCRSD16000F183000RR	16.000 MHz	≤ 50 Ω
MCRSD18432F183000RR	18.432 MHz	≤ 50 Ω
MCRSD20000F183000RR	20.000 MHz	≤ 50 Ω
MCRSD22118F183000RR	22.1184 MHz	≤ 50 Ω
MCRSD24000F183000RR	24.000 MHz	≤ 50 Ω
MCRSD24576F183000RR	24.576 MHz	≤ 50 Ω
MCRSD25000F183000RR	25.000 MHz	≤ 50 Ω
MCRSD27000F183000RR	27.000 MHz	≤ 50 Ω
MCRSD28224F183000RR	28.224 MHz	≤ 50 Ω
MCRSD40000T183000RR	40.000 MHz	≤ 100 Ω

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SPC-F005.DWG

DOC. NO. SPC-F005 * Effective: 7/5/02 * DCP No: 1388

SIZE
A

DWG. NO.

Ta-1081

ELECTRONIC FILE

Ta-1081.dwg

REV
A

SCALE: NTS

U.O.M.: Millimeters

SHEET: 2 OF 2