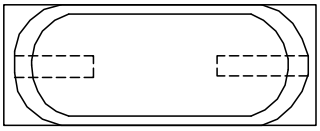
SPC TECHNOLOGY

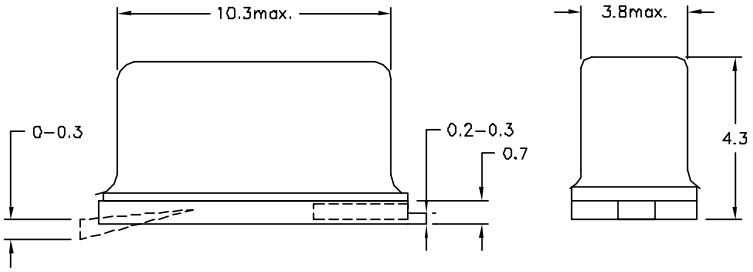
SPC-F005.DWG

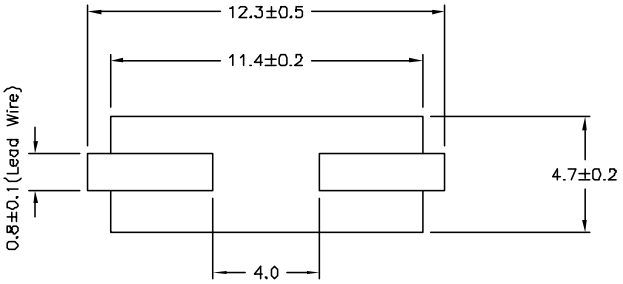
REVISIONS

DOC. NO. SPC-F005 • Effective: 7/8/02 • DCP No: 1398

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







RoHS Compliant

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

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

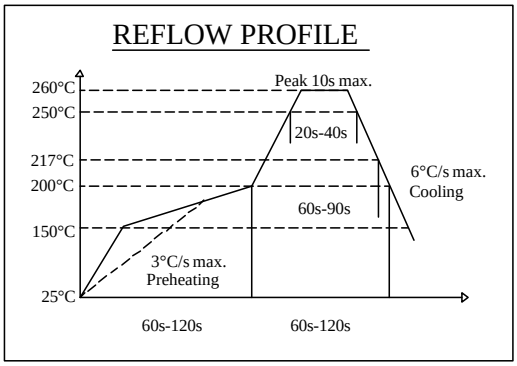
DRAWING TITLE: Crystal Resonator

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 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 ±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.	



RoHS Compliant

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

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SCALE: NTS U.O.M.: Millimeters SHEET: 2 OF 2