



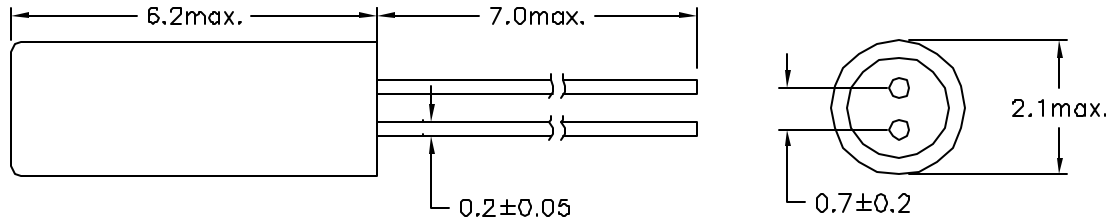
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SPC-F008.DWG

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



No.	DESCRIPTION	CONTENTS
1	Holder Type	JU206
2	Turnover Temperature	25°C± 2°C
3	Parabolic Curve Constant	-0.034 PPM/
4	Operating Temperature Range	-20°C~ +70°C
5	Storage Temperature Range	-40°C~ +80°C
6	Load Capacitance	12.5 pF Typ.
7	Trend Capacitance	0.0035pF Typ.
8	Shunt Capacitance	1.50pF Typ.
9	Capacitance Ratio	460 Typ.
10	Insulation Resistance (DC 100V ± 15V)	500M Ω Min.
11	Aging (25°C± 3°C)	±2ppm Max.
12	Shock Resistance	±2ppm Max.

Mfg. P/N	Nominal Frequency	Equivalent Series Resistance	Frequency Tolerance	
			25°C±2°C	Temp. Specific
MCRJ232000F12300H3H	32.000 KHz	50k Ω Max.	±30 ppm	-20°C ~ +70°C
MCRJ232768F12200H3H	32.768 KHz	35k Ω Max.	±20 ppm	
MCRJ275000F12300H3H	75.000 KHz	50k Ω Max.	±30 ppm	

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-1082	Ta-1082.dwg	A
SCALE: NTS	U.O.M.: INCHES [mm]	SHEET: 1 OF 2	

No.	DESCRIPTION	CONTENTS	Requirements
1	Lead Strength Lead Bending	Force of 0.9 kg is applied for 10 seconds to each lead in axial direction. Firmed the terminal up to 2 mm, lead shall be subjected to withstand against 90° bending its stem. This operation shall be done toward both direction.	No mechanical damage and the measured values shall meet electrical parameters.
2	Vibration	10~55Hz 0.75mm amplitude, in 3 directions duration of 30 minutes.	
3	Dropping	The crystal will be test by natural dropping to 30mm wooden board 3 times from high of 30 cm.	
4	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at 235 ±5°C for 2 ±0.5°C sec.	At least 95% of the terminal surface shall be coated by the solder
5	Resistance Solder Heat	Dipped the terminals up to 2 mm into the solder bath (350 ±5°C) for 3 sec, placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.
6	Thermal Shock	Temperature cycling from -20°C (30mins) to +70°C (30mins) was performed 3 times, then placed in a natural condition for 2 hours.	
7	Life Test (High Temperature)	Placed in a chamber (70 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	
8	Life Test (Low Temperature)	Placed in a chamber (-20 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	
9	Humidity	Placed in a chamber (Humi: 90 ~ 95% RH, Temp: 40 ±2°C) for 48 hours, then placed in a natural condition for 2 hours.	