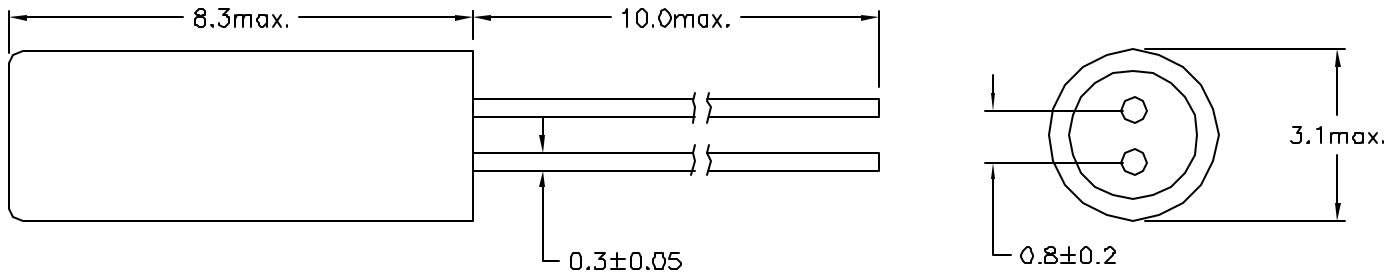


DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2022	A	RELEASED	JN	3/10/09	JWM	3/10/09	JWM	3/10/09



ELECTRICAL PARAMETERS:

No	DESCRIPTION	CONTENTS
1	Holder Type	JU308
2	Nominal Frequency	SEE TABLE
3	Oscillation Mode	AT-FUND
4	Load Capacitance	18 pF
5	Frequency Tolerance at 25°C± 3°C	±30 ppm
6	Frequency Tolerance at -10°C ~ +60°C	±30 ppm
7	Operating Temperature Range	-20°C ~ +70°C
8	Storage Temperature Range	-40°C ~ +85°C
9	Equivalent Series Resistance	≤ 80 Ω
10	Drive Level	50µW
11	Shunt Capacitance	≤ 5.0 pF
12	Insulation Resistance	> 500M Ω
13	Test Impedance Meter	KH1200
14	Aging	+ 3ppm/Year

PARTS TABLE:

Mfg. P/N	Nominal Frequency	Equivalent Series Resistance
MCRJ303579F18300HZH	3.579545MHz	≥ 120 Ω
MCRJ304000F18300HZH	4.000MHz	≥ 100 Ω
MCRJ306000F18300HZH	6.000MHz	≥ 80 Ω
MCRJ307372F18300HZH	7.3728MHz	≥ 80 Ω
MCRJ308000F18300HZH	8.000MHz	≥ 80 Ω
MCRJ311059F18300HZH	11.0592MHz	≥ 40 Ω
MCRJ311289F18300HZH	11.2896MHz	≥ 40 Ω
MCRJ316000F18300HZH	16.000MHz	≥ 30 Ω
MCRJ320000F18300HZH	20.000MHz	≥ 30 Ω

SPC-F004.DWG

<p>TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.</p>	<p>DRAWN BY: Jason Nash</p>	<p>DATE: 3/10/09</p>	<p>DRAWING TITLE: Crystal Resonator</p>			
	<p>CHECKED BY: Jeff McVicker</p>	<p>DATE: 3/10/09</p>	<p>SIZE A</p>	<p>DWG. NO. Ta-1114</p>	<p>ELECTRONIC FILE Ta-1114.dwg</p>	<p>REV A</p>
	<p>APPROVED BY: Jeff McVicker</p>	<p>DATE: 3/10/09</p>	<p>SCALE: NTS</p>		<p>U.O.M.: Millimeters</p>	<p>SHEET: 1 OF 2</p>

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SPECIFICATIONS

PHYSICAL & ENVIRONMENTAL PARAMETERS:

No	DESCRIPTION	CONTENTS	Requirements
1	Lead Strength	Force of 0.9 kg is applied for 10 seconds to each lead in axial direction.	No mechanical damage and the measured values shall meet electrical parameters.
	Lead Bending	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.	
	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 broad 3 times from high of 30 cm.	
4	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at 240 ± 5°C for 3±0.5 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 (240 ± 5°C) for 5 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.	