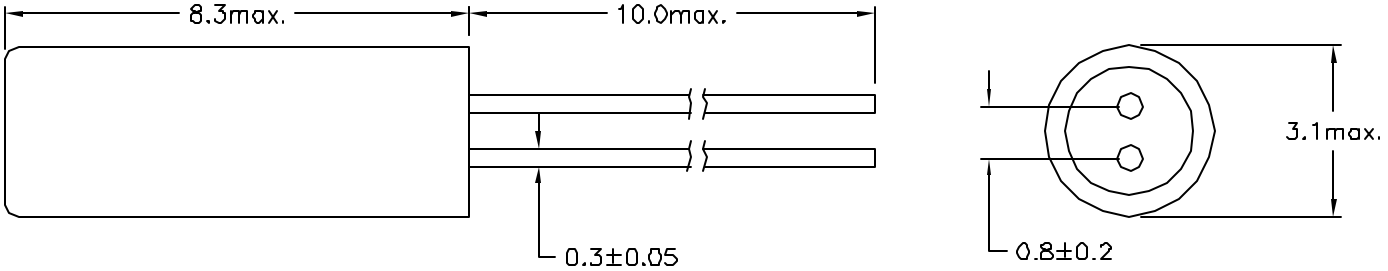
SPC TECHNOLOGY

REVISIONS			DOC. NO. SPC-F004 * Effective: 7/8/02 * DCP No: 1398					
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2022	A	RELEASED	JN	3/10/09	JWM	3/10/09	JWM	3/10/09

RoHS Compliant



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	≥40Ω
MCRJ316000F18300HZH	16.000MHz	≥30 Ω
MCRJ320000F18300HZH	20.000MHZ	≥30 Ω

SPC-F004.DWG

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

RoHS Compliant

SPECIFICATIONS

PHYSICAL & ENVIRONMENTAL PARAMETERS:

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 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.	