Travelling Merchant:_____

DATASHEET

Standard: **M11A-BCAC-38.88MHz**

Plot			The Label
Drawing	Auditing	Approve	
吴双霞	陈昌盛	刘搏	
Date: 2009-06-26			Stamp, please! Thanks!

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The parameter of product

MODEL：M11A-BCAC-38.88MHz

1. Output	
1.1. Nominal Frequency	38.88MHz
1.2. Waveform	HCMOS
	Voh≥2.7V，Vol≤0.4V
1.3. Duty cycle	45%~55%　　@50%
1.4. Rise / Fall time (10%～90%)	≤8ns
1.5. Load	15pF
2. Frequency Stabilities	
2.1. Stability vs. operating temp. rang	$\leq \pm 2.8 \times 10^{-7}$　　@0°C ~ +70°C ref. to 25 °C
2.2. Initial frequency	$\leq \pm 1.0 \times 10^{-6}$　　@25℃
2.3. Stability vs supply voltage change	$\leq \pm 2.0 \times 10^{-7}$　　@3.3VDC±5%
2.4. Stability vs Load change	$\leq \pm 1.0 \times 10^{-7}$　　@15pF±5%
2.5. Aging	$\leq \pm 2.0 \times 10^{-8}$/ day
	$\leq \pm 1.0 \times 10^{-6}$/ first year
	$\leq \pm 3.0 \times 10^{-6}$/ after 10 years
3. Supply Voltage	
3.1. Supply Voltage	+3.3VDC±5%
4. Current	
4.1. Current consumption	≤15mA
5. Phase noise (Typical)	
5.1. 1KHz	-130dBc/Hz
6. Environmental conditions	
6.1. Operable temperature range	0°C to +70°C
6.2. Storage temperature range	-50°C to +95°C
6.3. Vibration	IEC 60068-2-6 Test Fc,10～55Hz, 0.75mm displacement, 30 minutes in each of three mutually perpendicular axes at 1 octave per minute
6.4. Shock	IEC 60068-2-27 Test Ea, 1000m/S^2 acceleration for 6ms duration, 3 shocks in each direction along three mutually perpendicular axes.
6.5. Sealing	IEC 60068-2-17 Test Qk (Fine Leak), (MIL-STD-202 Method 112 Test condition C) and IEC 60068-2-17 Test Qc (Gross Leak),(MIL-STD-202 Method 112 Test

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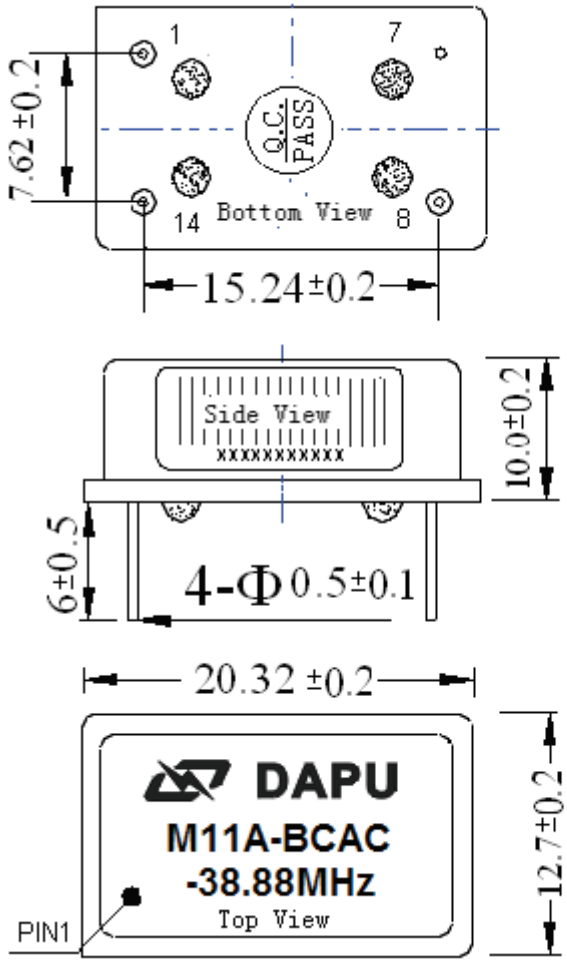
condition D)

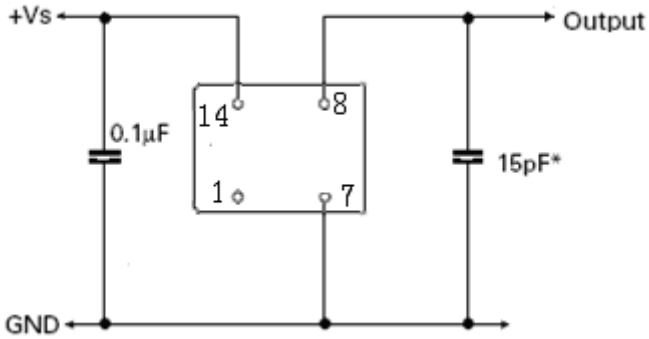
7. Mechanical



Pin Connections	
1	NC
7	Ground
8	Output
14	Supply Voltage

Note: The bottom view means that the stitches are against the people **Unit : mm**

8. Test circuit



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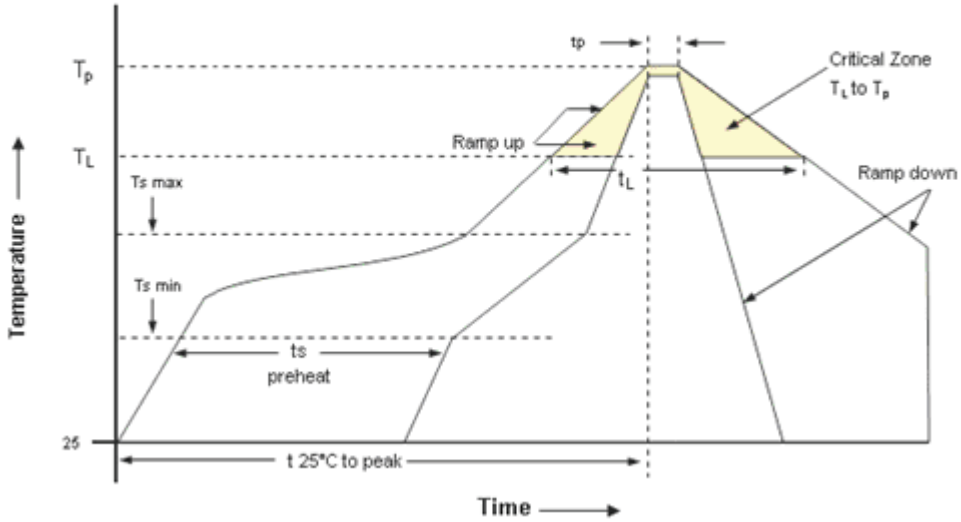
9. Recommended Reflow Profile

Solderprofile:



Profile Feature	Pb-Free Assembly	Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to Tp)	3°C/second max.	Time 25°C to Peak Temperature	8 minutes max.
Preheat -Temperature Min Ts_{min}) -Temperature Min Ts_{max}) -Time (min to max) (ts)	150°c 200°c 60-180 seconds	Time maintainted above - Temperature (T_L) - Time (t_L)	 217°C 60-150 seconds
Ts_{max} to T_L - Ramp-up Rate	3°C/second max.		
Time maintainted above - Temperature (T_L) - Time (t_L)	217°C 60-150 seconds	Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Peak Temperature (Tp)	max 260°C	Ramp-down Rate	6°C/second max.

Note: All temperatures refer to topside of the package, measured on the package body surface.