CRYSTEK CRYSTALS
A Division of Crystek Corporation

WLAN Clock Oscillator with Standby Feature

CCWLAN-2BC-20-44.000
3.2×5 mm SMD, **3.3V, HCMOS**

RoHS Compliant

Frequency:	44.000 MHz
Frequency Stability:	±20ppm Max (**all inclusive)
Temperature Range:	
Operating:	-20°C to 70°C
Storage:	-45°C to 90°C
Input Voltage:	3.3V ±5%
Input Current:	10mA Max
Standby Current:	5uA Max
Output:	HCMOS
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	4ns Max @ 20% to 80% Vdd
Logic:	"0" = 10% Vdd Max
	"1" = 90% Vdd Min
Load:	15pF
Start-Up Time:	10mS Max
Disable Time:	100nS Max
Enable Time:	10mS Max
Aging:	<3ppm 1st/yr, <1ppm every year thereafter

Mechanical:

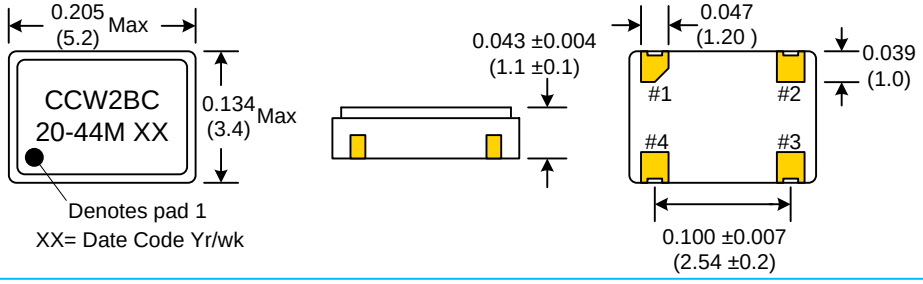
Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Vibration:	MIL-STD-883, Method 2007, Condition A
Solvent Resistance:	MIL-STD-202, Method 215
Resistance to Soldering Heat:	MIL-STD-202, Method 210, Condition I or J

Environmental:

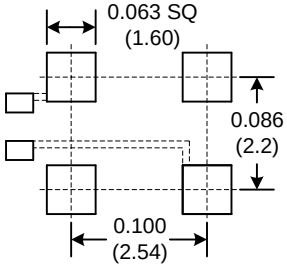
Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

** Inclusive of all conditions; calibration, temperature, supply voltage, load change, shock, vibration and one year aging at 25°C ambient operating temperature.

Dimensions inches (mm)
All dimensions are Max unless otherwise specified.

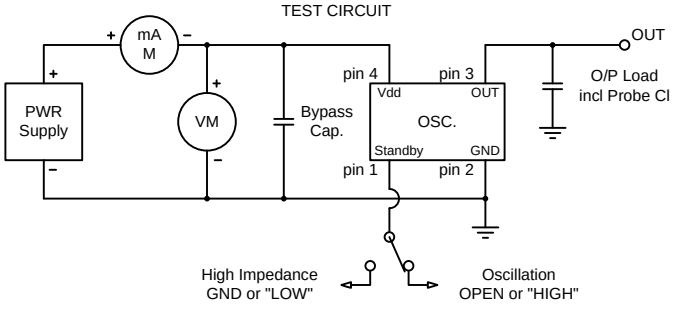


SUGGESTED PAD LAYOUT

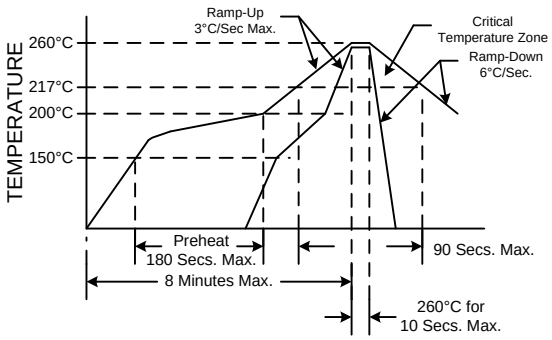


0.01uF Bypass Capacitor Recommended

TEST CIRCUIT



RECOMMENDED REFLOW SOLDERING PROFILE



NOTE: Reflow Profile with 240°C peak also acceptable.

Standby Function	
Function pin 1	Output pin
Open	Active
"1" level 0.7×Vdd Min	Active
"0" level 0.3×Vdd Max	High Z

Internal Pull-up resistor from pin 1 to pin 4 insures active operation if pin 1 is configured open (not connected).

PIN	Function
1	Standby
2	GND
3	OUT
4	VDD

Available on 16mm Tape and Reel in quantities of 1,000 pcs.

PN: CCWLAN-2BC-20-44.000 Rev. C

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