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Jameco Part Number 325665

**GOLDSUN ELECTRONICS CO., LTD**  
**SPECIFICATION OF PARTS**

**CUSTOMER :**           GOLDSUN          

**JAMECO NO.**           325665          

**T Y P E :**           CRYSTAL OSCILLATOR          

**REDACTOR :**           陈乃军          

**DATE :** 2005/08/17

APPROVER : 胥爱军

DATE : 2005/08/17

## SPECIFICATION OF CRYSTAL OSCILLATOR

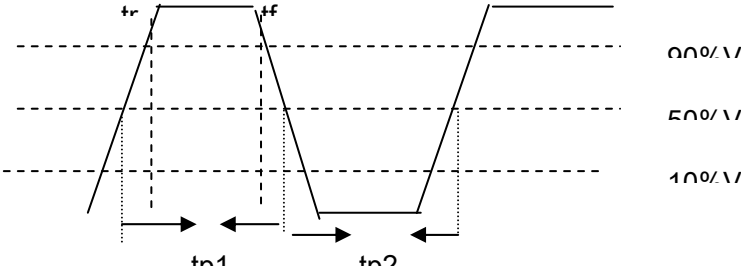
### PARAMETERS

NO.	DESCRIPTION	CONTENTS
1	Part Number	TQOPD0820M0000A3
2	Custom Part Number	ECS-2100A-200
3	Type	OSC
4	Nominal Frequency	20.0000MHz
5	Frequency Calibration	±100PPM
6	Supply Voltage	3.3V±10%
7	Supply Current	35mA (Max)
8	Storage Temperature	-40 -- +85°C
9	Operation Temperature	-0--- +70°C
10	Output Load	CMOS
11	Symmetry	40% to 60%(50%VDD)
12	Low Level Output Voltage	+0.5V(10%VDD)Max
13	High Level Output Voltage	+4.5V(90%VDD)Min
14	Rise And Fall Time (Tr,Tf)	10ns
15	Holder Type	HALF SIZE
15	Marking:	TKD+20.000A+MHz

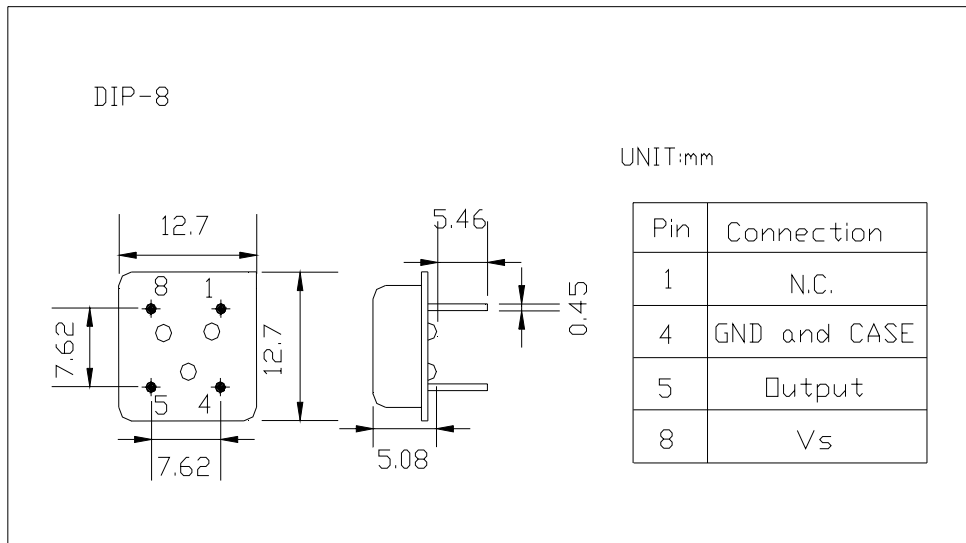
16	Other :
Remarks:	

**SPECIFICATION OF CRYSTAL OSCILLATOR**

**OUTPUT WAVE FORM:**



## DIMENSIONS(mm)



## PAD CONFIGURATION

Pin No.	Descriptions	Symbol
1	Out state control	INH
4	Ground (Vss)	Vss
5	Output	QOUT
8	Power supply	VDD

## SPECIFICATION OF CRYSTAL OSCILLATOR

### ENVIRONMENTAL

1. Dry:	T: 105°C, 16 hour
2. Cold:	T: -40°C, 100hour
3. High temperature and high humidity:	T: 66°C, RH: 85% Duration: 192 hours

	<p>After the test ,taking out the samples from the chamber ,in the normal room ambient condition for more than 24 hours then do the function test.</p>
4. Thermal shock:	<p>① High temperature : 66°C, RH: 45%. Duration: 1 hour.</p> <p>② Lower temperature: -40°C. Duration: 1 hour.</p> <p>③ After finishing every cycle temperature shock test ,in the normal room temperature for 3 hours, then do the function test.</p> <p>④ After finishing all the cycle, in the normal room ambient for 24 hours then do visual inspection and function test.</p>
5. Vibration:	<p>Vibration direction: X. Y. Z</p> <p>Vibration frequency: 50HZ</p> <p>Amplitude: 2.2mm<sub>p-p</sub></p> <p>Duration:≥ 30min for every face</p>
6. Drop:	<p>100cm height 10 times on 3mm hard wooden board</p>
<p>After each test ,the change of frequency is within ±5ppm.</p>	