

Travelling Merchant: \_\_\_\_\_

# DATASHEET

Standard:           **O55A-B425-10.00MHz-A**          

P/N: \_\_\_\_\_

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2020.08.20			

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### Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2020.07.15
1.1	The “Current Consumption during warm up”changed	<i>Amway</i>	2020.08.20



## 1. Electrical Parameters

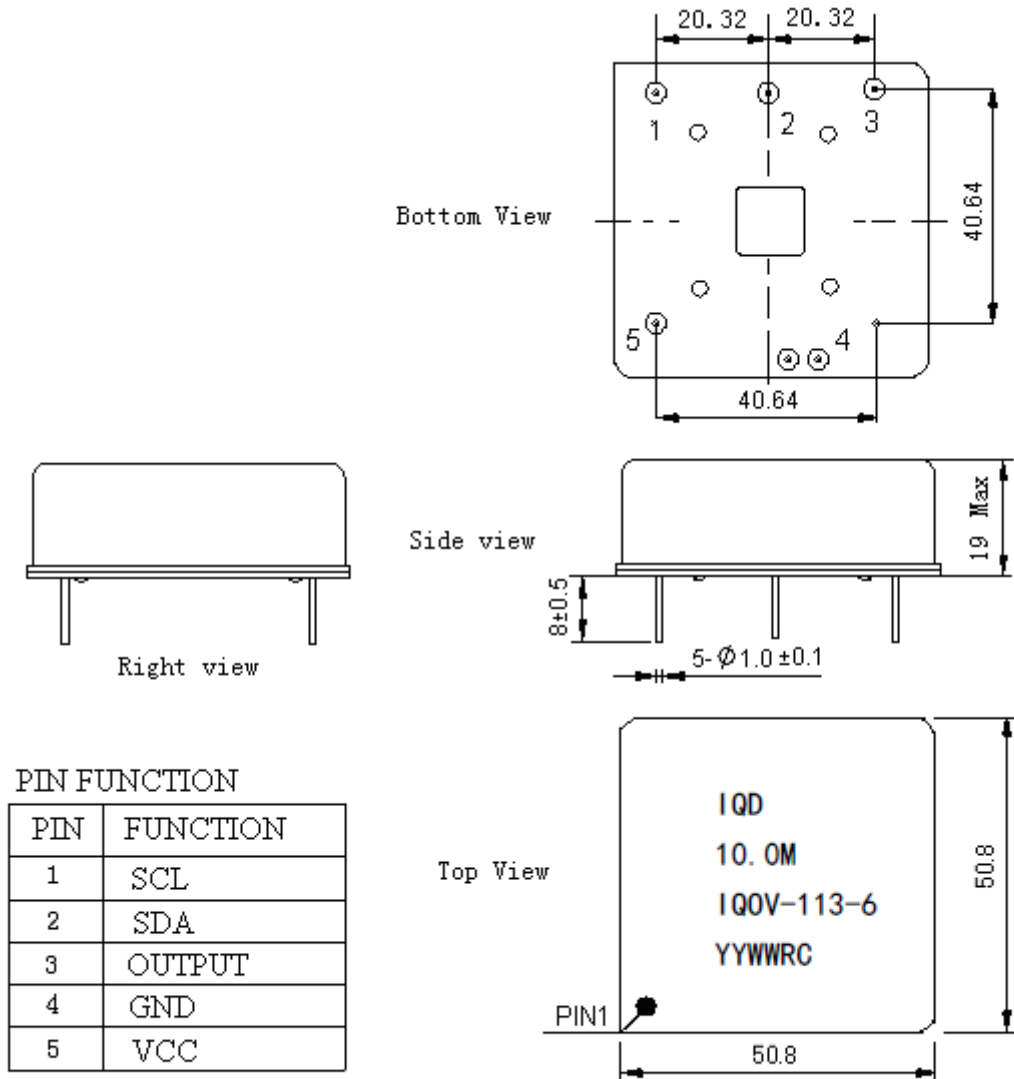
MODEL: O55A-B425-10.00MHz-A						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	10.00			MHz	
	Output Waveform	Sine wave				
	Level	5.5		8.5	dBm	
	Load	50			$\Omega$	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-60	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-9}$	$T_A$ varied from $-40^\circ\text{C}$ to $85^\circ\text{C}$ , measurement referenced to frequency observed with $f_{ref} = (f_{max}-f_{min})/2$ , $V_{cc}=5.0\text{V}$ , $O_{load}=50\Omega$ . temperature variable speed less than $2^\circ\text{C}$ per minute.
	Initial Frequency Tolerance	-0.05		+0.05	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$ , $V_{cc}=5.0\text{V}$ , DAC=0x7FFF and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. supply voltage	-0.01		+0.01	$\times 10^{-9}$	measurement referenced to frequency observed $T_A=25^\circ\text{C}$ , $V_{cc}$ varied from 4.75V to 5.25V, DAC=0x7FFF, $O_{load}=50\Omega$ .
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-9}$	5% Load Change Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$ , $V_{cc}=5.0\text{V}$ , DAC=0x7FFF, $O_{load}=50\Omega$ .
	Short Term Stability			0.002	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to $25^\circ\text{C}$ ; 1s.
	Aging Tolerance per day	-0.1		+0.1	$\times 10^{-9}$	$V_{cc}, V_c, T_A$ constant Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$ , $V_{cc}=5.0\text{V}$ , DAC=0x7FFF, $O_{load}=50\Omega$ and after 30 days of operation.
	Aging Tolerance 1Year	-0.02		+0.02	$\times 10^{-6}$	
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Current Consumption			800	mA	@ $25^\circ\text{C}$
	Current Consumption during warm up			2600	mA	
	Warm-up time			15	min	@ $25^\circ\text{C}$ within $\pm 0.05 \times 10^{-6}$ of final frequency with reference after 1 hour on.



Voltage Control Characteristics	Frequency Tuning Range	-0.5		-0.2	$\times 10^{-6}$	DAC=0x0000. measurement referenced to DAC=0x7FFF
		-0.05		+0.05	$\times 10^{-6}$	DAC=0x7FFF. measurement referenced to Exactly 10.00MHz
		+0.2		+0.5	$\times 10^{-6}$	DAC=0xFFFF. measurement referenced to DAC=0x7FFF
	Linearity			10	%	
	Slope	Positive				
Phase Noise	Phase Noise		-100	-90	dBc/Hz	1Hz
			-130	-120		10Hz
			-145	-135		100Hz
			-150	-145		1KHz
			-155	-150		10KHz
			-155	-150		100KHz
			-155	-150		1MHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+105	°C	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; JEDEC JESD22A-115C.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz~500Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X ,Y , Z), IEC 68-2-06 Test Fc.				
Shock	50g; 11ms; half sine wave (3 times for each 3 directions X ,Y, Z ),IEC 68-2-27 Test Ea/Severity 50A.					



## 2. Mechanical Structure (mm)



**Note1:** Referential Weight 56.1g

**Note2:** NC is not connect

**Note3:** The YY representative: year  
The WW representative: week

## 3. I2C Devices Address

### 3.1 DIGITAL-TO-ANALOG CONVERTER,VOLTAGE OUTPUT

Device name : DAC8571

Device supplier : TI

Device address : 1001100



### 3.2. DIGITAL THERMOMETER AND THERMOSTAT

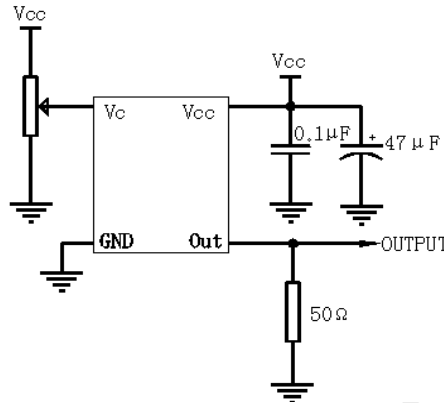
Device name: LM75

Device supplier: National

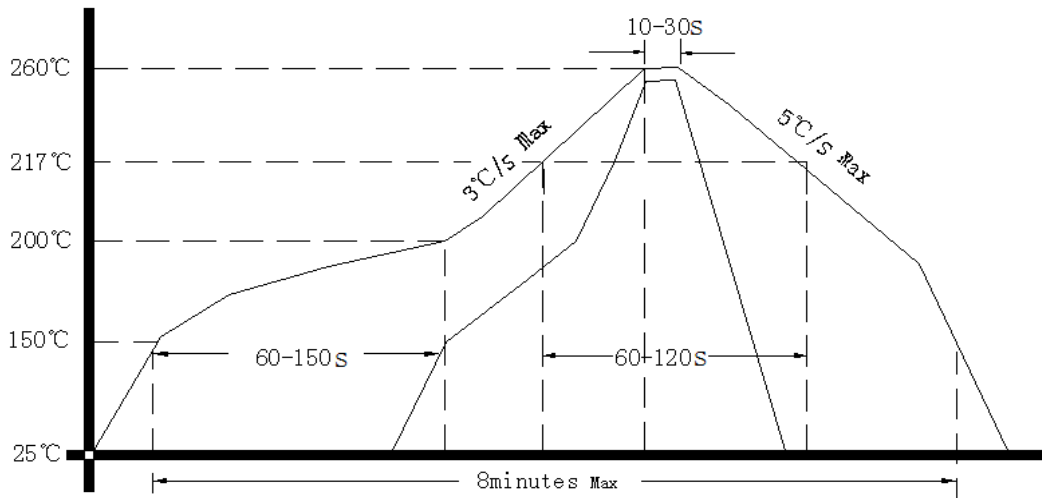
Device address: 1001000

Note: More detailed information see the datasheet provide by the supplier.

### 4. Test Circuit



### 5. Reflow Soldering Curve (RoHS)



### 6. Package(mm)

