

# SURFACE MOUNT CLOCK OSCILLATORS



SERIES :

OM753,755

RoHS Compliant

**Specifications**

Item	Specifications	
	OM755	OM753
Series	OM755	OM753
Nominal Frequency	0.5MHz to 106MHz	0.5MHz to 125MHz
Frequency Stability ※ (±20ppm = -10°C~+70°C only)	OM75310:±100ppm	OM75510:±100ppm
	OM75305 :±50ppm	OM75505 :±50ppm
	OM753025:±25ppm	OM755025:±25ppm
	OM75302 :±20ppm	OM75502 :±20ppm
Input Supply Voltage	+5VDC±5%	+3.3VDC
Input Supply Current	10mA~60mA Max	10mA~50mA Max
Output Load	TTL-CMOS(See Table 1)	
Output Symmetry	Nomal : 40 ~ 60% ,Tight : 45 ~ 55%	

<Table 1>

Output Level	CMOS	TTL
Load	15pF(50pF Max)	2TTL or 5TTL or 10TTL
Output Rise and Fall Time	10ns max : F≤40Mhz, 6ns max : F>40Mhz at 10%~90% Vdd at 0.4~2.4 VDC	
Output Vol.	"0"Level : $V_{OL} 0.1V_{DD} \text{ max}$	"0"Level : $V_{OL} 0.4V \text{ max}$
	"1"Level : $V_{OH} 0.9V_{DD} \text{ min}$	"1"Level : $V_{OH} 2.4V \text{ min}$
Operating temperature range	0°C to +70°C	
Extended temperature range	-40°C to +85°C	
Storage temperature range	-55°C to +125°C	

※Inclusive of 25c tolerance,operating temperature range, voltage or load changes, aging, shock and vibration.

**Features**

- ▶ Ultra miniature package
- ▶ Excellent for high density packaging
- ▶ Suitable for reflow soldering
- ▶ 1.5mm Max Height is available

**Packing**

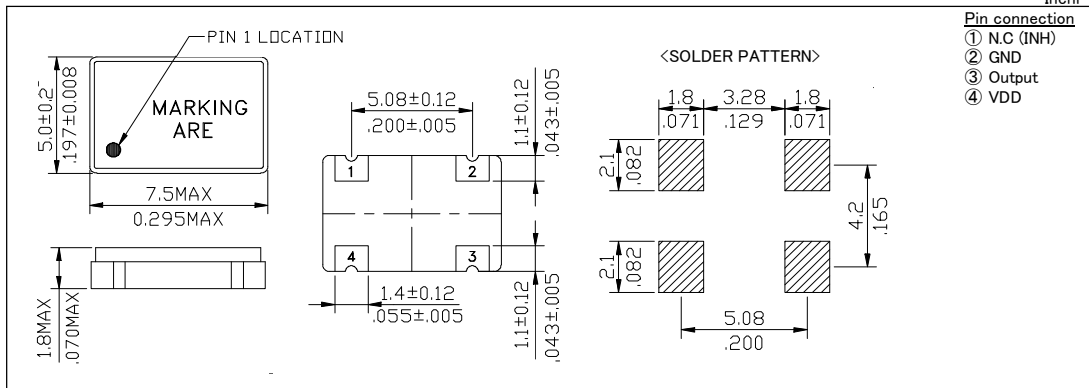
- ▶ 16mm Tape Width,8mm pitch
- ▶ 1000 Pieces per reel

**Part Numbering System**

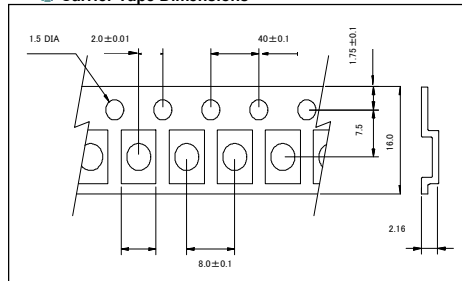
Holder Type	Frequency stability	Frequency	Tight Symmetry	Extended Temperature	Tape & Reel
OM753	10	IN MHz	T	EX	TR
OM755	05				
	025				
	02				

Example: OM75310-50.000MHz-T-EX-TR

**Outline Drawing**



**Carrier Tape Dimensions**



5F daVinchi Shin-Yokohama131Bldg.,1-3-1,Shin-Yokohama, Kohoku-ku, Yokohama-city, Kanagawa,222-0033,Japan  
Tel: 045-476-3440 Fax: 045-476-3443 E-mail: postmaster@omcg.jp

# SURFACE MOUNT CRYSTAL OSCILLATORS

SERIES :

OM535,533

RoHS Compliant

## Specifications

Item	Specifications	
Series	OM535	OM533
Nominal Frequency	2.5MHz to 66.666MHz	
Frequency Stability ※	OM53510:±100ppm	OM53310:±100ppm
	OM53505:±50ppm	OM53305±50ppm
	OM53503:±30ppm	OM53303:±30ppm
Input Voltage	+5.0VDC±0.5VDC	+3.0VDC±0.3VDC
Input Current	2.5MHz~20.000MHz/12mA MAX 20.10MHz~66.666MHz/30mA MAX	2.50MHz~66.666MHz/30mA MAX
Output Symmetry	40~60% at 0.5VCC	
Output Level 0	Vcc x 0.9V MINIMUM	
Output Level 1	Vcc x 0.1V MAXIMUM	
Output Load	15pF	
Output Rise and Fall Time	8ns MAXIMUM	10ns MAXIMUM
Enabel/Disable Function	Pin1:High or open /Pin3:Oscillation Pin1:Low /Pin3:High Impedance	
Enabel/Disable Time	100ns MAXIMUM	150ns MAXIMUM
Operating Temperature Range	-10°C~+70°C	
Strong Temperature Range	-25°C~+85°C	
Standby Current	100uA MAXIMUM:Control=L level VCC=5.0V	

## Features

- ▶ Ultra miniature package
- ▶ 5.0V or 3.0V supply voltage
- ▶ Enable/Disable function

## Packing

- ▶ 178mm Reel diameter
- ▶ 12mm Tape width, 8mm pitch
- ▶ 1,000 Pieces per reel

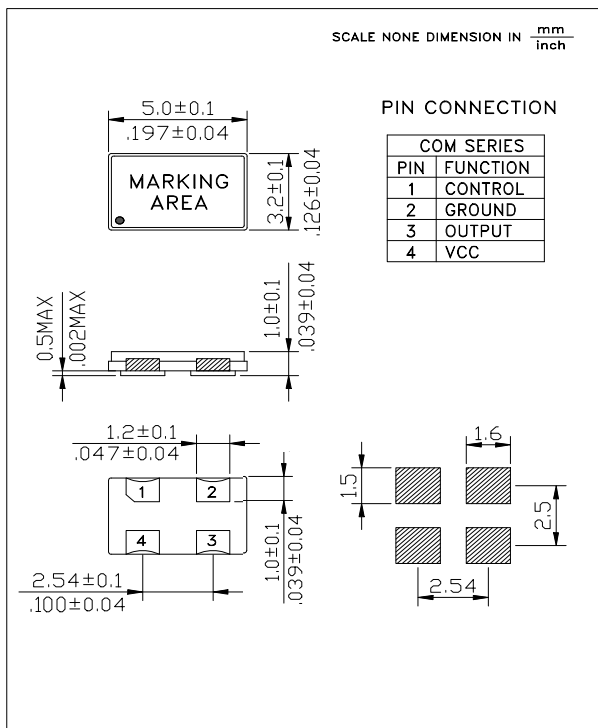
※Inclusive of 25C tolerance, operating temperature range, voltage or load changes, aging, shock and vibration

## Part Numbering System

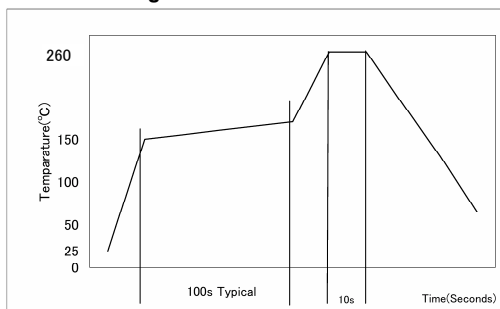
Holder type	Frequency stability	Frequency	Tape and Reel
OM535	10 05	IN MHZ	TR
OM533	03		

Example:OM53510-20.000-TR

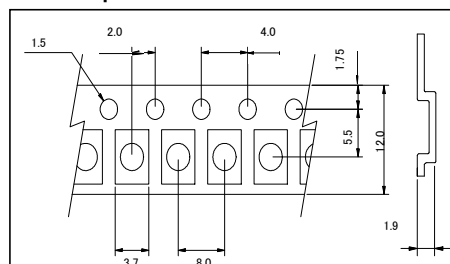
## Outline Drawing



## Reflow Soldering Profile



## Carrier Tape Dimensions



# SURFACE MOUNT CRYSTAL OSCILLATORS

OMCG CO., LTD

SERIES :

OM323,325

RoHS Compliant

## Specifications

Item	Specifications	
	OM323	OM325
Series	OM323	OM325
Nominal Frequency	0.75MHz to 75.0MHz	
Frequency Stability	02:±25PPM, 05:±50PPM, 10:±100PPM	
Supply Voltage	3.3V	5.0V
Input Current	12mA , 20mA	
Output Load Capacitance	15 pF	
Duty	40~60% , 45%~55%	
Rise Time	10ns MAX	
Fall Time	10ns MAX	
Output	"0"Level 10%Vdd MAX. "1"Level 90%Vdd MIN.	
Start Up Time	10ms MAX.	
Aging	$\Delta f/f = \pm 5\text{PPM MAX. at } 25^\circ\text{C}$	
Enable/Disable Phrase Delay Time	100ns MAX	
Tri-State Function	"1"or Open/Oscillation +2.2V MIN. "0"Output Disable in High Impedance +0.8V MAX.	
Operating Temperature Range	0~+70°C/-20~+70°C	
Strong Temperature Range	-50°C~+125°C	

## Features

- ▶ +3.0V, +2.5V lower Voltage available

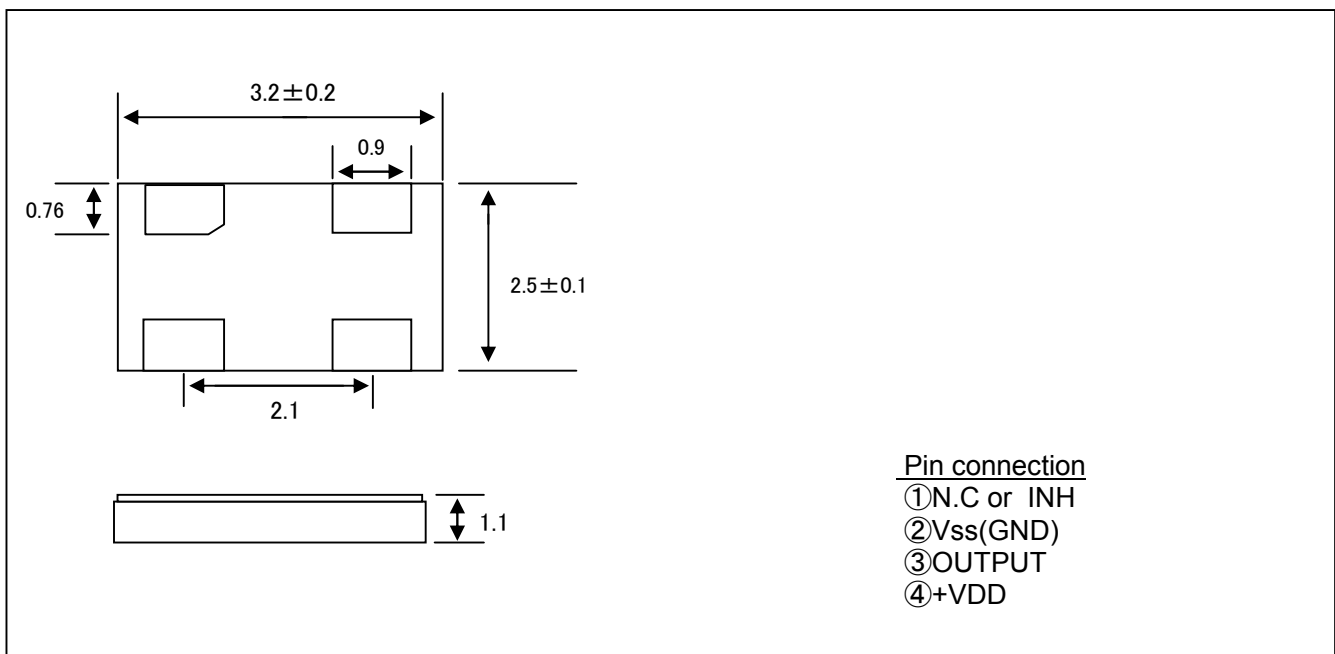
## Part Numbering System

Holder type	Frequency stability	Frequency	Tape and Reel
OM323	02	IN MHz	TR
OM325	05		
	10		

Example:OM32302-16.000-TR

## Outline Drawing

Unit:mm



OMCG CO., LTD

5F daVinchi Shin-Yokohama131Bldg.,1-3-1,Shin-Yokohama, Kohoku-ku, Yokohama-city, Kanagawa,222-0033,Japai  
Tel: 045-476-3440 Fax: 045-476-3443 E-mail: postmaster@omcg.jp

# SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

OMCG CO., LTD

SERIES :

OM 227,230,233

RoHS Compliant

## Specifications

Item	Specifications		
Series	OM227	OM230	OM233
Nominal Frequency	1.00 to 60.00MHz		
Frequency Tolerance	015: ±15PPM 02: ±20PPM 03: ±30PPM 05: ±50PPM 10: ±100PPM		
Turnover Temperature	+25°C ±5°C		
Supply Voltage	2.7±0.2V	3.0±0.2V	3.3±0.2V
Current Consumption (Depends on freq.and supply vol.)	5mA TYP./20MHz/3V 8mA typ./50MHz/3V		
Output Voltage	CMOS,TTL		
Frequency Stability (Ref to 25°C)	-10~+60°C	±15PPM,±30PPM,±50PPM,±100PPM	
	-20~+70°C	±20PPM,±30PPM,±50PPM,±100PPM	
	-40~+85°C	±30PPM,±50PPM,±100PPM	
Duty Ratio	50±10%,50±5%		
Fanout(Depends on supply voltage)	10LS		
Storage temprature range	-40°C to +85°C		

## Features

- ▶ Ultra miniature package  
2.5mmx2.0mmx0.9mm MAX
- ▶ Ceramic package and metal lid with extreme accuracy and stability

## Packing

- ▶ 180mm Reel diameter
- ▶ 8mm Tape width,4mm pitch

## STANDBY CRYSTAL TABLE

Stanby	Output
"H"or"open"	Output enabled
"L"	Osillation Stop and high impedance output

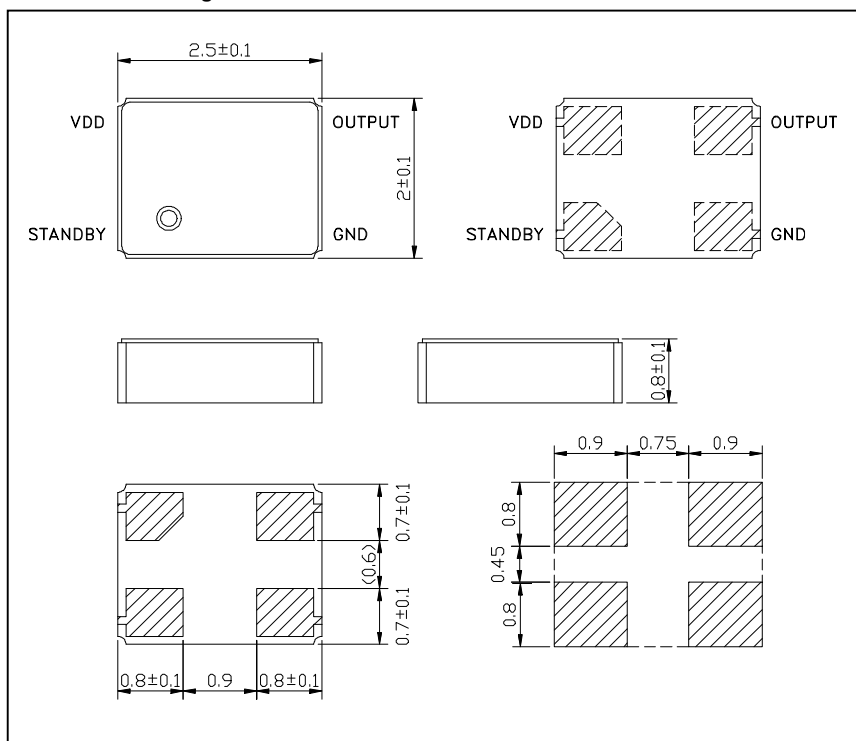
## Part Numbering System

Holder type	Frequency stability	Frequency	Tape and Reel
OM227	015	IN MHz	TR
OM230	02		
OM233	03		
	05		
	10		

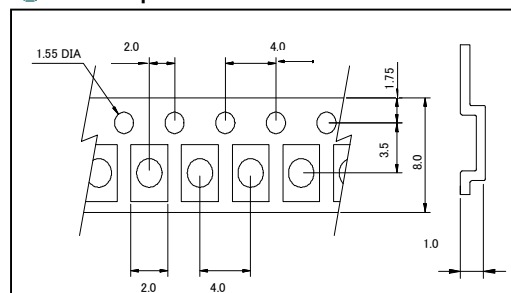
Example:OM227015-1.000-TR

Unit : mm

## Outline Drawing



## Carrier Tape Dimensions



OMCG CO., LTD

5F daVinci Shin-Yokohama131Bldg.,1-3-1,Shin-Yokohama, Kohoku-ku, Yokohama-city, Kanagawa,222-0033,Japan  
Tel: 045-476-3440 Fax: 045-476-3443 E-mail: postmaster@omcg.jp

# SURFACE MOUNT CLOCK OSCILLATORS



SERIES :

## OMA6436

RoHS Compliant

### Specifications

Item	Specifications	
Nominal Frequency	32.768 kHz	
Frequency Tolerance	-10°C to +60°C	+30 to -60PPM/VDD=2.0 to 6.0V
	25°C	+30 to 0PPM/VDD=2.0 to 6.0V
Oscillation Start Time	Max 500M sec/3.3v/25°C	
Power Supply Voltage	1.5V to 6.0V	
Power Consumption(No Load)	Typ:3μA TYP 3.3V, MAX:5μA/3.3V	
Load Capacitance	15pF	
Output Symmetry	45% to 55% (at 1/2VDD)/2 to 6V/25°C	
Rise Time	200nS MAX/0.3 to 3.0V	
Fall Time	200nS MAX/3.0V to 0.3V	
Input Level	V <sub>IH</sub> :+0.9VDD MIN/V <sub>IL</sub> :+0.1VDD MAX	
Output Level	V <sub>IH</sub> :+0.9VDD MIN/V <sub>IL</sub> :+0.1VDD MAX	
Operating temperature range	-10°C to +60°C	
Storage temperature range	-40°C to +85°C	
Reflow Conditions	230°C±5°C MAX for 10sec. MAX	

### Features

- ▶ Low Power Consumption 5μA/3.3V
- ▶ Small SMD Package 6.5X4.0X2.0mm
- ▶ Tristate Output

### Packing

- ▶ 1000 Pieces per reel

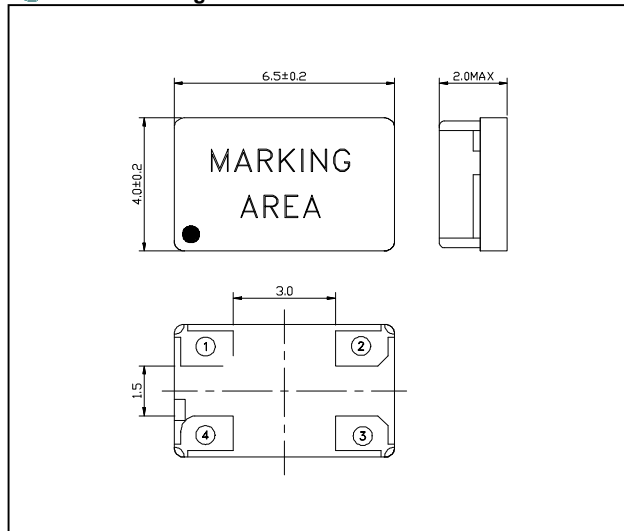
### Part Numbering System

Holder Type	-	Frequency
OMA6436		IN kHz

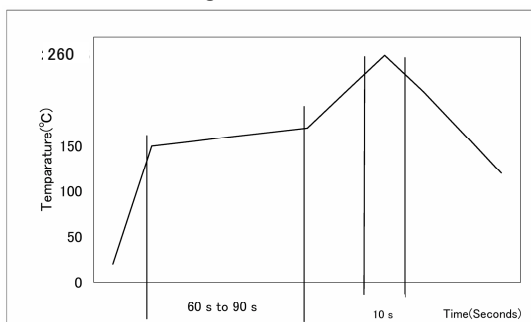
Example: OMA6436-32.768

### Outline Drawing

Unit : mm



### Reflow Soldering Profile



### Measurement Circuit

