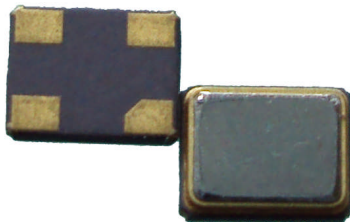


Crystal Oscillator Series			
OSC 3225B			
<b>Features</b> ◆RoHS Compliant    ◆HCMOS/TTL compatible			

### Electrical Specifications

Item		Specifications					
Type		1.8V		2.5V		3.3V	
Nominal Frequency Range		32.768KHZ					
		0.032768MHz to 80.000MHz					
Frequency Stability		±20ppm(Standard) at 25 °C±3 °C, ±10ppm to ±100ppm available					
Operating Temperature		-20 °C to +70 °C(Standard), -40 °C to +85 °C available					
Storage Temperature		-55 °C to +125 °C					
Supply Voltage		1.8V±10%		2.5V±10%		3.3V±10%	
Supply Current Max.	MHz			MHz		MHz	
	0.032~0.99	4mA	0.032~0.99		5mA	0.032~0.99	8mA
	1.0~74.99	7mA	1.0~74.99		10mA	1.0~74.99	12mA
	75.0~135.0	11mA	75.0~168.0		15mA	75.0~200.0	25mA
Output	Rise & Fall Time	180ns: 0.032 to 0.39MHz		9ns: 0.40 to 0.99MHz			
		7ns: 1.0 to 19.99MHz		5ns: 20.0 to 39.99MHz			
		4ns: 40.0 to 119.99MHz		2ns: 120.0 to 200.0MHz			
	Load	15PF					
	Current Max.	15mA					
	Low Level	V <sub>DC</sub> × 0.1 Max.					
	High Level	V <sub>DC</sub> × 0.9 Min.					
Symmetry at 1/2 V <sub>DC</sub>		45/55% typical, 40/60% available					
Start Up Time		<5ns					
Aging		±2ppm/year					

### Stability vs. Temperature

◆ Standard		2	3	5	0	6	7	Remarks
◇ Please specify		±20ppm	±30ppm	±50ppm	±100ppm	±10ppm	±15ppm	
C	-20 °C to +70 °C	◆	◇	◇	◇	◇	◇	Standard
D	-40 °C to +85 °C	◇	◇	◆	◇	◇	◇	

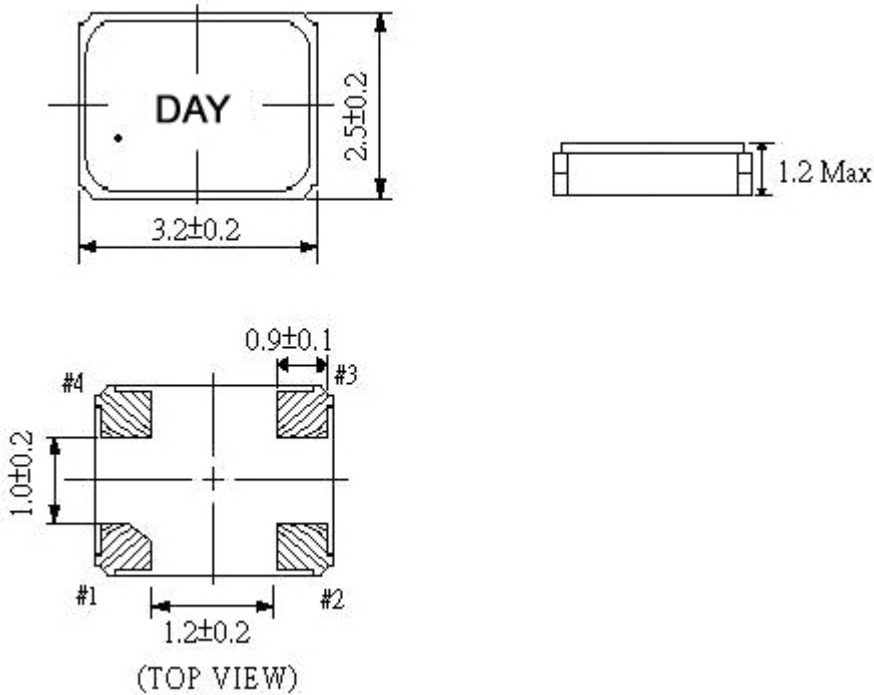
### Ordering Information

Q	O	Type	Pin	XX.XXXX XXX.XXX	M	Output Load	Supply Voltage	Stability Vs.Temp.	Operating Temp.	Symmetry At 1/2 V <sub>c</sub>	Option
Q:Quartz	32:		B:	Center frequency	M:		A:3.3V				F:Lead Free
O:Oscillator	3.2*2.5mm	4Pins		0.032 to 200MHz	MHz	1: 15pF	C:2.5V	See Table	See Table	1:45/55%	T:T&R
							D:1.8V			2:40/60%	Blank:Blank
<b>Example:QO32B20.0000M1A2C1FT</b>											
(Oscillator,3.2*2.5mm ,4Pins, 20.0000MHz, 15pF, 3.3V, +/-20ppm,-20 to +70deg., 45/55%,T&R,Lead free)											

## Crystal Oscillator Series

## OSC 3225B

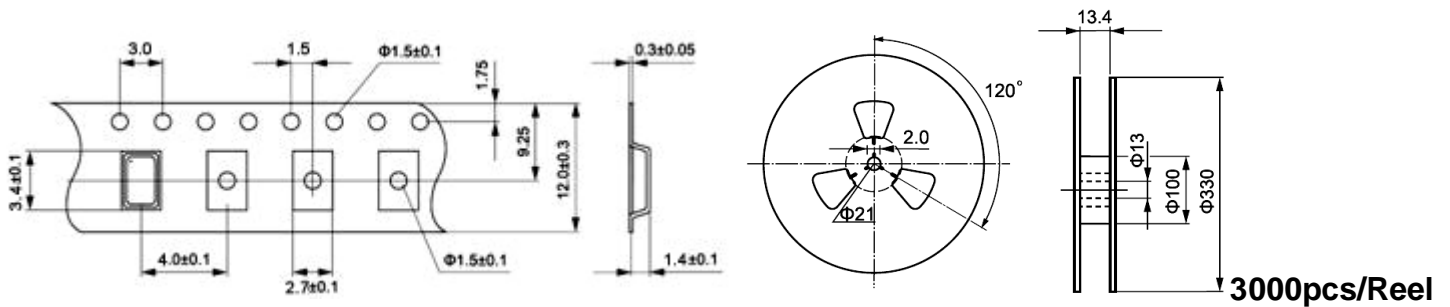
### Dimensions



Pin	Connection
#1	E/D
#2	GND
#3	OUTPUT
#4	V <sub>DC</sub>

UNIT:mm

### Taping Specification



### Reflow Soldering Profile

