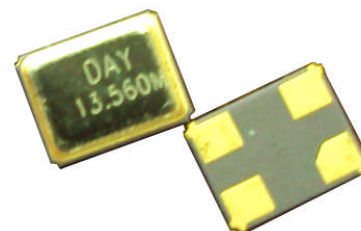


Crystal Oscillator Series	
OSC 2016B	Features ◆RoHS Compliant ◆HCMOS/TTL compatible



Electrical Specifications

Item		Specifications		
Type		1.8V	2.5V	3.3V
Nominal Frequency Range		1.000MHz to 80.000MHz		
Frequency Stability		±20ppm(Standard) at 25℃±3℃, ±10ppm to ±100ppm available		
Operating Temperature		-20℃ to +70℃(Standard), -40℃ to +85℃ available		
Storage Temperature		-55℃ to +125℃		
Supply Voltage		1.8V±10%	2.5V±10%	3.3V±10%
Supply Current Max.	MHz		MHz	MHz
	1.0~19.99	4mA	1.0~19.99	4mA
	20.0~39.99	5mA	20.0~39.99	5mA
	40.0~80.0	8mA	40.0~80.0	8mA
Output	Rise & Fall Time	5ns: 1.0 to 19.99MHz 4ns: 20.0 to 39.99MHz 3ns: 40.0 to 59.99MHz 2ns: 60.0 to 80.00MHz		
	Load	15PF		
	Current Max.	8mA		
	Low Level	V _{DC} × 0.1 Max.		
	High Level	V _{DC} × 0.9 Min.		
Symmetry at 1/2 V _{DC}		45/55% typical, 40/60% available		
Start Up Time		<4ns		
Aging		±2ppm/year		

Stability vs. Temperature

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

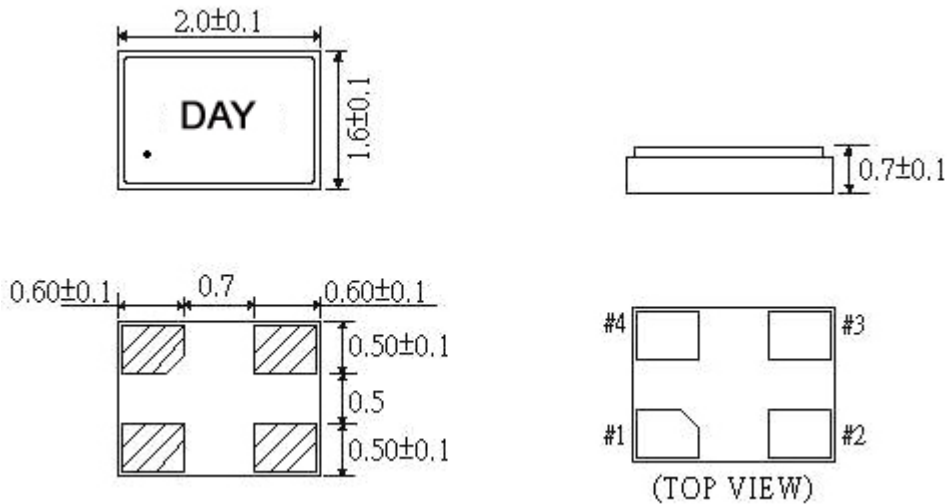
Ordering Information

Q	O	Type	Pin	XX.XXXX XXX.XXX	M	Output Load	Supply Voltage	Stability Vs.Temp.	Operating Temp.	Symmetry At 1/2 V _{DC}	Option
Q:Quartz	21:		B:	Center frequency	M:		A:3.3V C:2.5V D:1.8V				F:Lead Free T:T&R Blank:Bulk
O:Oscillator	2.0*1.6mm		4Pins	0.032 to 200MHz	MHz	1: 15pF	See Table	See Table	1:45/55% 2:40/60%		
Example:QO21B20.0000M1A2C1FT											
(Oscillator, 2.0*1.6mm, 4Pins, 20.0000MHz, 15pF, 3.3V, +/-20ppm, -20 to +70deg., 45/55%, T&R, Lead free)											

Crystal Oscillator Series

OSC 2016B

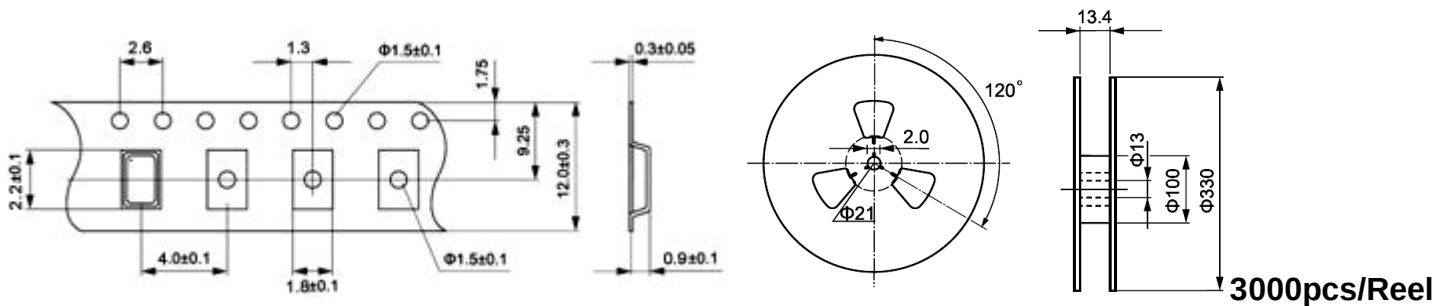
Dimensions



in	Connection
#1	E/D
#2	GND
#3	OUTPUT
#4	V _{DC}

UNIT:mm

Taping Specification



Reflow Soldering Profile

