

Features

Frequency range : 1MHz to 133MHz
 SMD seam sealing ceramic package
 Supply voltage : 1.8V ~ 3.3V
 CMOS output
 Tri-state function available
 External dimensions (mm)
 L : 3.2 x W : 2.5 x H : 1.0
 RoHS compliant & Pb free

Applications

Networking, Server, Storage
 Wireless communications
 Fibre channel, Ethernet, SATA, SAS,
 PCI-E, USB, WLAN, xDSL, xPON
 PC mainboard, Notebook, HDD, SSD,
 Graphics card, Computer peripherals
 Audio, Video, Gaming, Printer, DSC,
 IP CAM, Consumer products

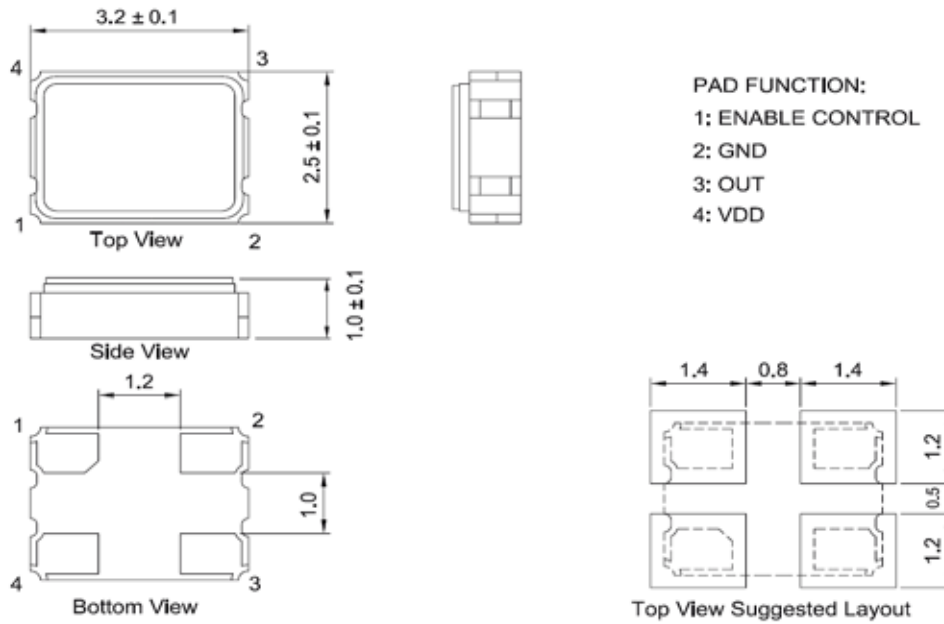
Electrical Characteristics

Item	7X	Conditions
Frequency Range (F_0)	1MHz ~ 133MHz	
Frequency Stability (F_{stab})	± 50 , ± 25 ppm	-10°C ~ +70°C; Note [1]
	± 50 , ± 25 , ± 20 ppm	-40°C ~ +85°C; Note [1]
Operating Temperature Range (T_{OTR})	-10°C ~ +70°C	
	-40°C ~ +85°C	
Supply Voltage (V_{DD})	1.8V, 2.5V, 3.3V	$V_{DD} \pm 10\%$
Current Consumption (I_{DD})	10 mA Max.	1MHz ~ 75MHz
	15 mA Max.	75MHz ~ 133MHz
Output Type	CMOS	
Output Load (C_L)	15 pF	
Output Voltage High (V_{OH})	90% V_{DD} Min.	
Output Voltage Low (V_{OL})	10% V_{DD} Max.	
Rise & Fall Time (T_r / T_f)	8 ns Max.	10% ~ 90% of V_{DD}
Duty Cycle	45% ~ 55%	
Start-up Time	5 ms Max.	
Enable Voltage High, Logic "1"	70% V_{DD} Min.	Input to Pin1
Enable Voltage Low, Logic "0"	30% V_{DD} Max.	Note [2]
Phase Jitter, RMS	1 ps Max.	Note [3]
Aging (F_{aging})	± 3 ppm Max.	at 25°C ± 3 °C, first year
Storage Temperature Range (T_{STR})	-55°C ~ +125°C	

Notes:

- [1] Inclusive of frequency tolerance at 25°C, 1st year aging at 25°C, and variations over operating temperature, supply voltage, and load.
 [2] Output will be enabled if Pin1 is Logic "1" or open; Output will be disabled if Pin1 is Logic "0".
 [3] Freq. 10MHz~40MHz, integrated 12kHz~5MHz; Freq. >40MHz, integrated 12kHz~20MHz.

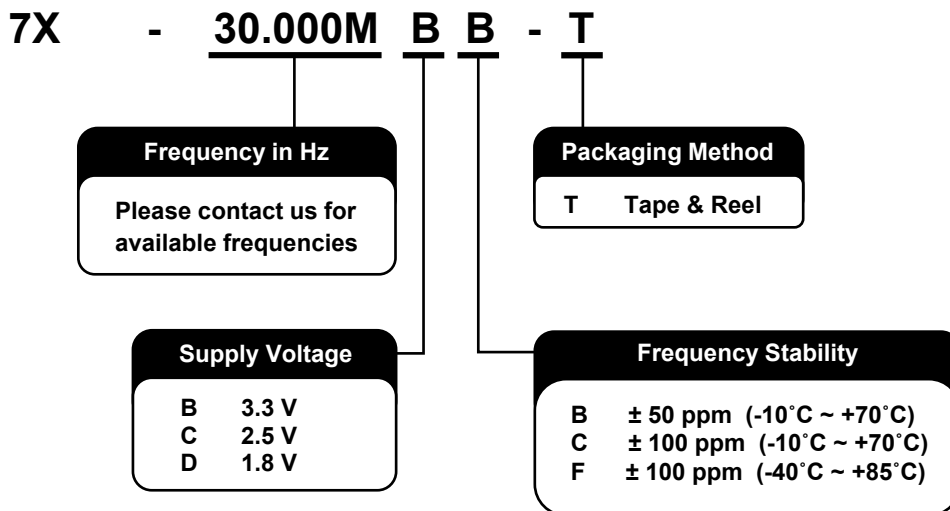
Dimensions



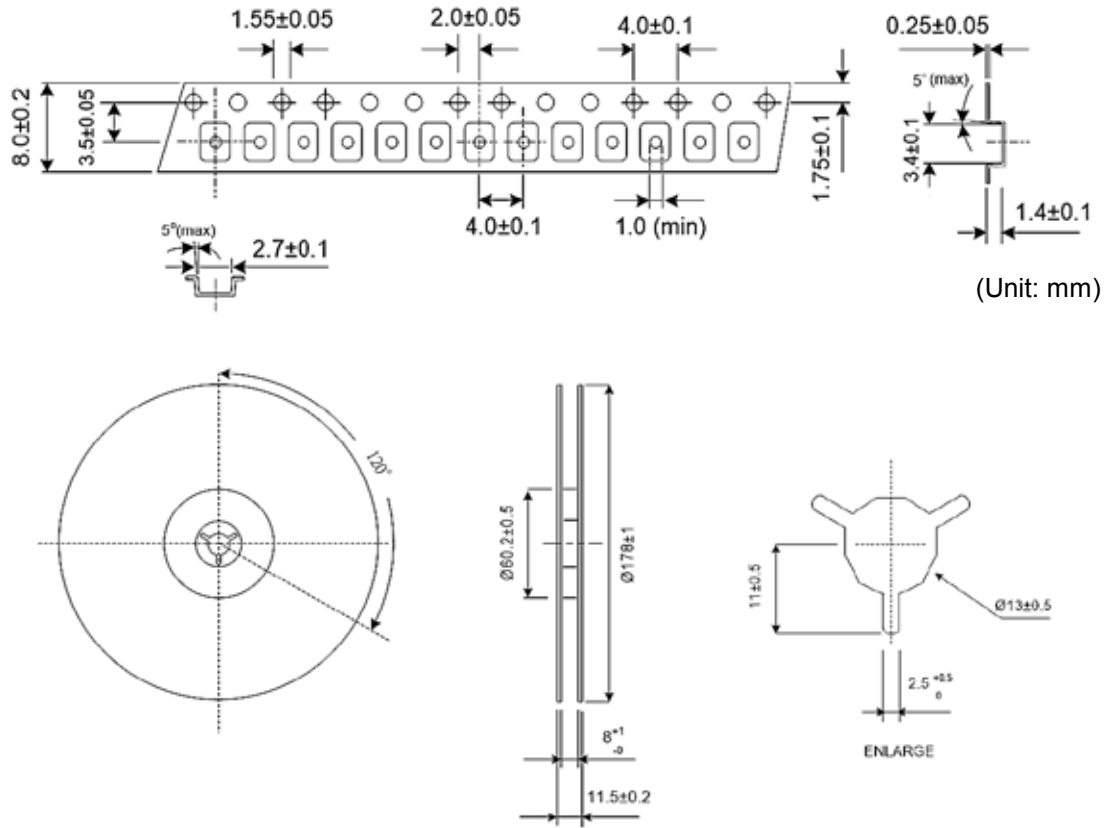
PAD FUNCTION:
 1: ENABLE CONTROL
 2: GND
 3: OUT
 4: VDD

(Unit: mm)

Ordering Information



Packing



Reflow Profile

Solder melting point : $220^\circ\text{C} \pm 10^\circ\text{C}$, 60 sec. Min.
 Peak temperature : $260^\circ\text{C} \pm 10^\circ\text{C}$, 10 sec. Min.

