

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

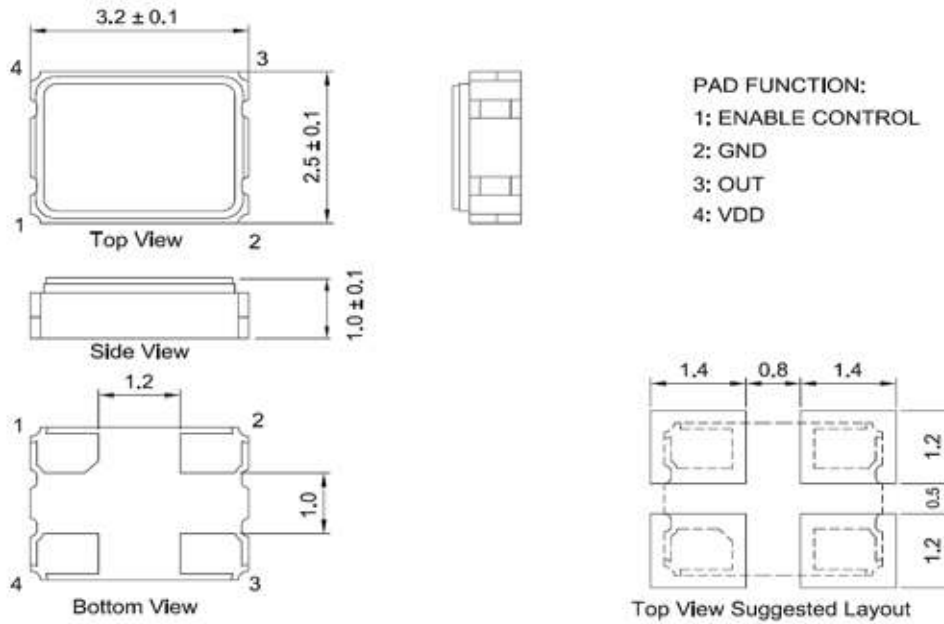
Electrical Characteristics

| 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:

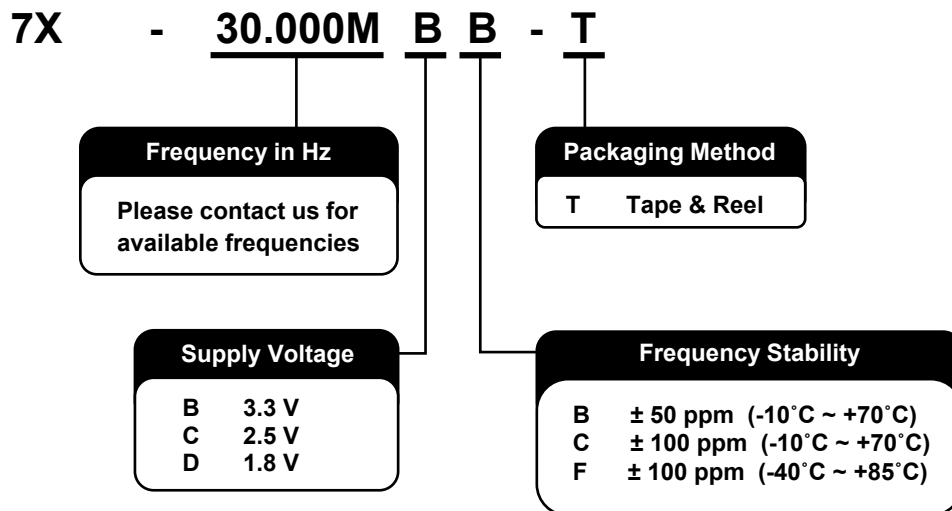
- [1] Inclusive of frequency tolerance at 25°C, 1st year aging at 25°C, and variations over operating temperature, supply voltage, and load.
 [2] Output will be enabled if Pin1 is Logic "1" or open; Output will be disabled if Pin1 is Logic "0".
 [3] Freq. 10MHz~40MHz, integrated 12kHz~5MHz; Freq. >40MHz,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

Dimensions

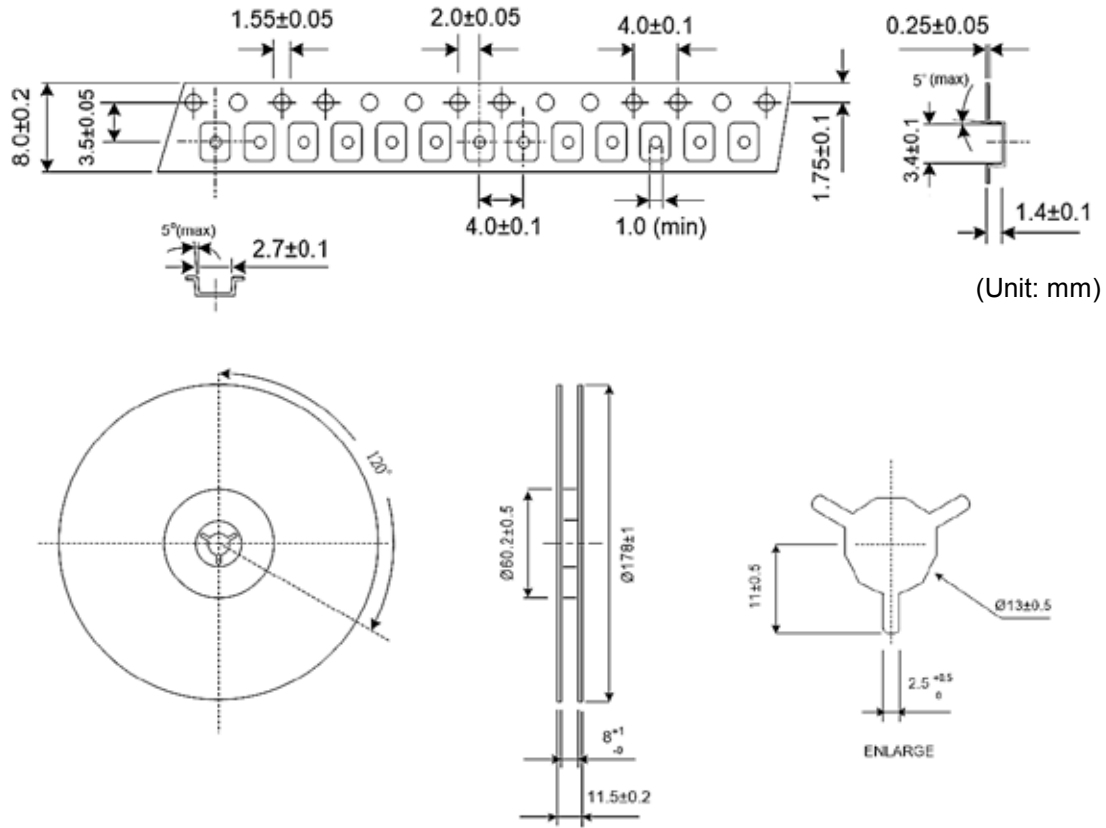


(Unit: mm)

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.

