

Features

- > Frequency range : 1MHz to 40MHz
- > SMD seam sealing ceramic package
- > Supply voltage : 1.8V ~ 3.3V
- > CMOS output
- > Phase modulation clock function selectable for EMI reduction
- > External dimensions (mm)
L : 2.0 x W : 1.6 x H : 0.76
- > RoHS compliant & Pb free

Applications

- > Imaging & Display Devices
- > HD Camera, DVR
- > HD Surveillance Camera
- > Computer Peripherals
- > Consumer products

Electrical Characteristics

Item		8NE	Conditions
Frequency Range (F_0)		1MHz ~ 40MHz	
Frequency Stability (F_{stab})		±50 ppm	Note [1] & [2]
Operating Temperature Range (T_{OTR})		-40°C ~ +85°C	
		-40°C ~ +105°C	
		-40°C ~ +125°C	
Supply Voltage (V_{DD})		1.8V, 2.5V, 3.3V	$V_{DD} \pm 5\%$
Current Consumption (I_{DD})		10 mA Max.	
Output Type		CMOS	
Output Load (C_L)		15 pF	
Output Voltage High (V_{OH})		80% V_{DD} Min.	
Output Voltage Low (V_{OL})		20% V_{DD} Max.	
Rise & Fall Time (T_r / T_f)		8 ns Max.	20% ~ 80% of V_{DD}
Duty Cycle		45% ~ 55%	
Start-up Time		1 ms Max.	
Phase Jitter, RMS		1 ps Max.	Note [2] Integrated 12kHz~5MHz.
Phase Modulation Clock Mode	Enable	30% V_{DD} Max. (Logic "0")	Input to Pin1; Note [3]
	Disable	70% V_{DD} Min. (Logic "1")	
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, variations over operating temperature, supply voltage, load and 1st year aging at 25°C.
- [2] Phase modulation clock mode is disabled.
- [3] Phase modulation clock mode will be enabled if Pin1 is Logic "0"; Phase modulation clock mode will be disabled if Pin1 is Logic "1" or open (Internal pull-high resistor).

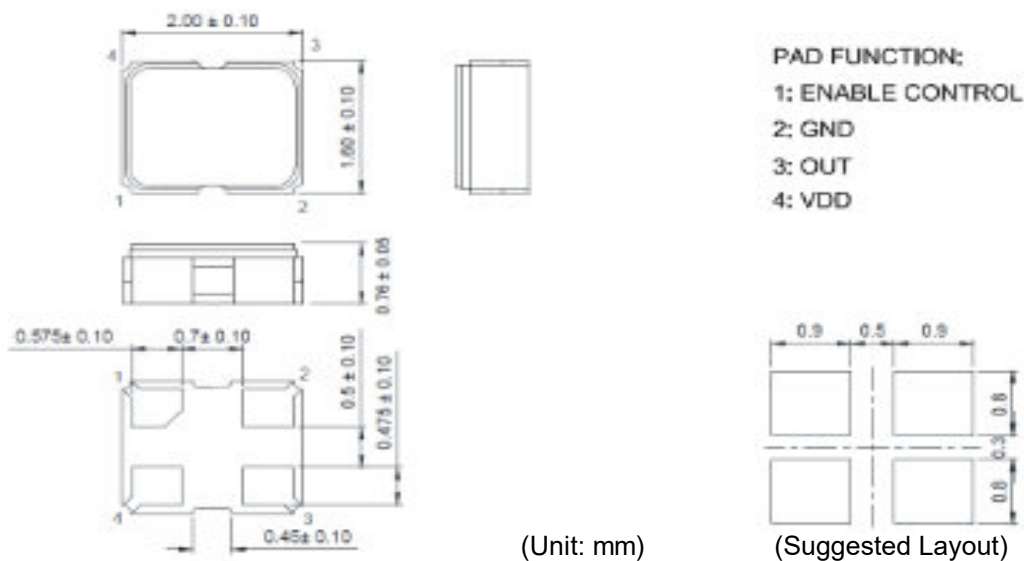
Phase Modulation Mode Deviation ^[4]

Frequency (MHz)	Deviation range (%)		
	V _{DD} 1.8V	V _{DD} 2.5V	V _{DD} 3.3V
20	± 0.54	± 0.36	± 0.29
24	± 0.62	± 0.42	± 0.34
25	± 0.65	± 0.45	± 0.35
27	± 0.70	± 0.54	± 0.40

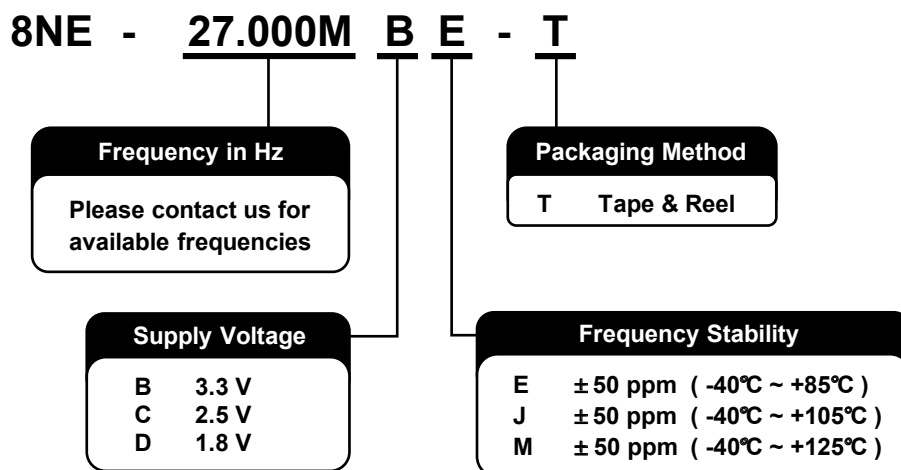
Notes:

[4] Contact us for available frequencies and deviation range.

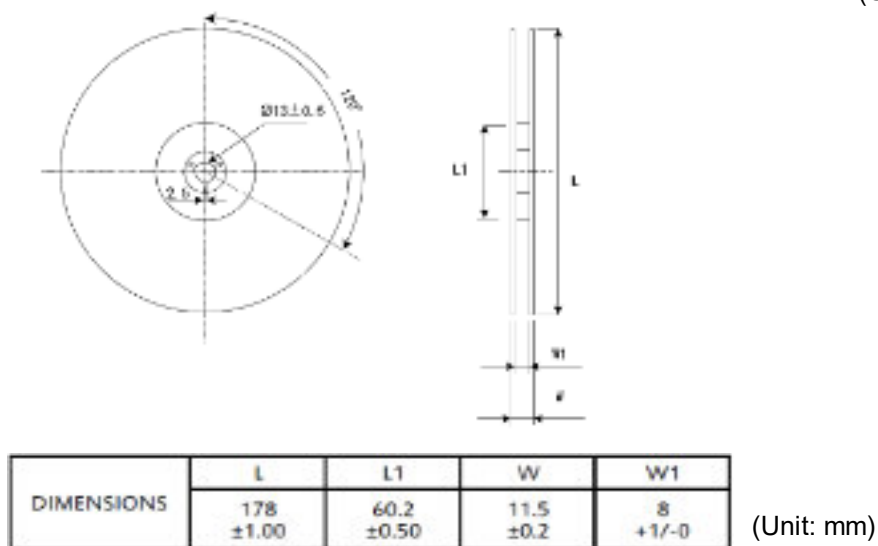
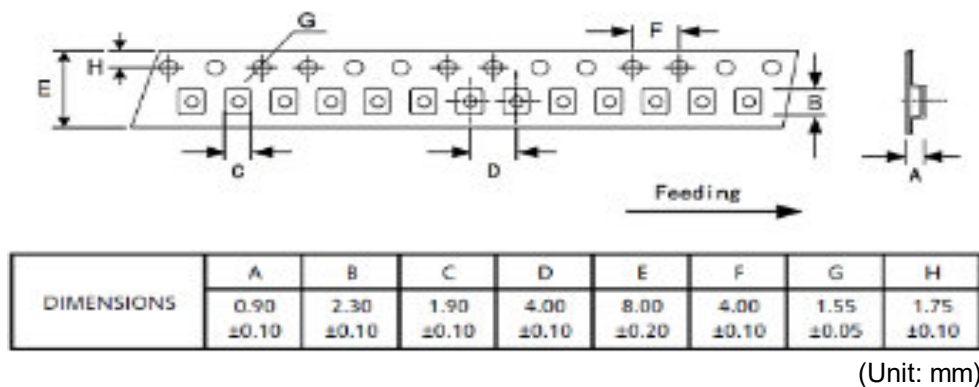
Dimensions



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.

