



**THE DATASHEET OF
8NE-20.000MDM-T**



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} ± 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).

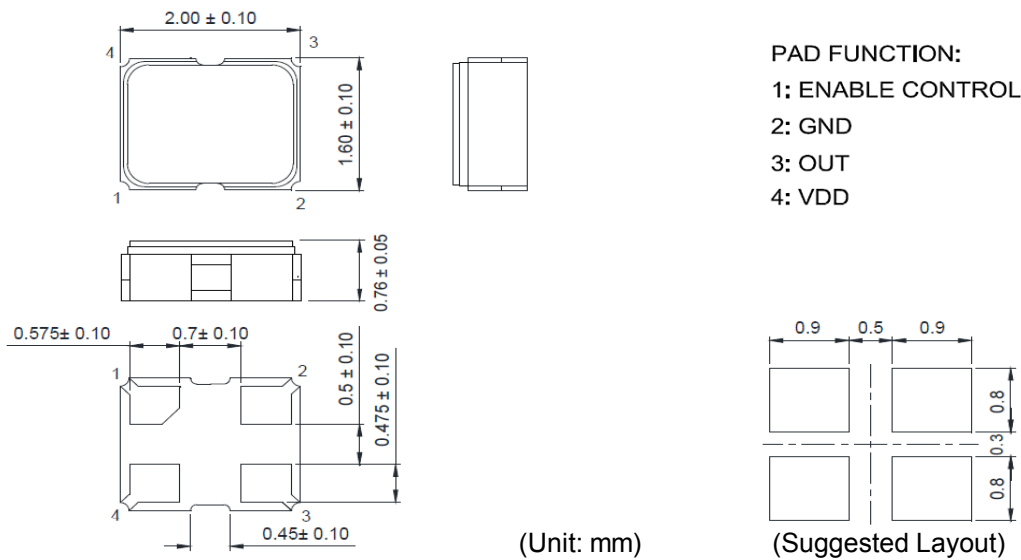
Phase Modulation Mode Deviation [4]

Frequency (MHz)	Deviaton 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

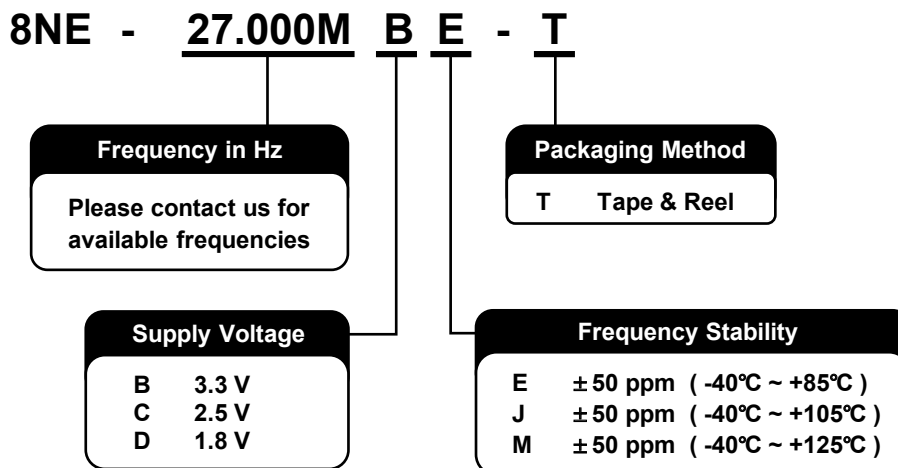
Notes:

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

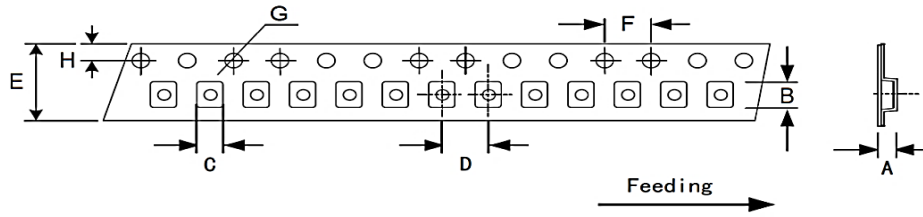
Dimensions



Ordering Information

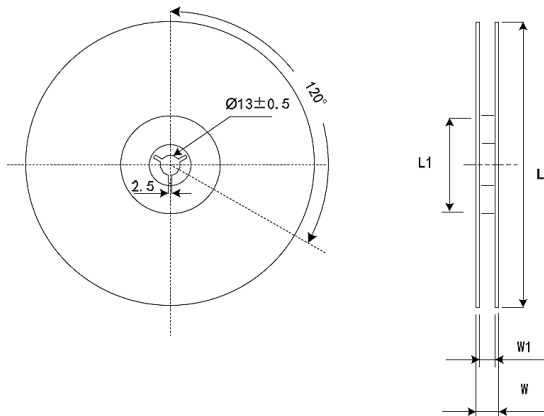


Packing



DIMENSIONS	A	B	C	D	E	F	G	H
	0.90 ±0.10	2.30 ±0.10	1.90 ±0.10	4.00 ±0.10	8.00 ±0.20	4.00 ±0.10	1.55 ±0.05	1.75 ±0.10

(Unit: mm)



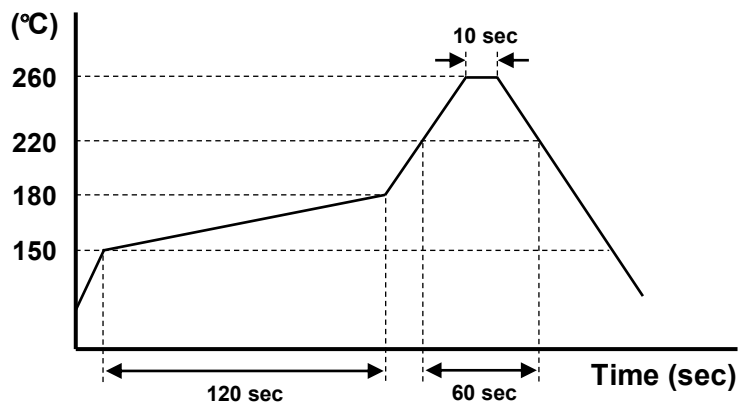
DIMENSIONS	L	L1	W	W1
	178 ±1.00	60.2 ±0.50	11.5 ±0.2	8 +1/-0

(Unit: mm)

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.



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 8NE-20.000MDM-T on WIN SOURCE](#)
-  [TXC CORPORATION](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management