

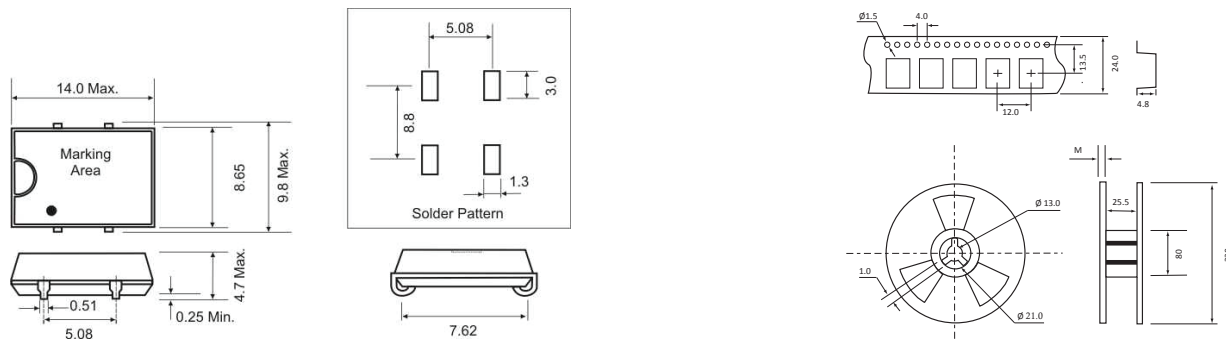
Frequency Stability Options							
Operating Temperature Range		Frequency Stability (PPM)					
Available Temp. Range Options		±15	±20	±25	±30	±50	±100
Standard	-10°C to +70°C	N/A	N/A	N/A	N/A	BS	CS
Industrial	-40°C to +85°C	N/A	N/A	N/A	N/A	BI	CI

Operating Conditions	
Storage Temp	-55°C to +125°C
Option Codes	
Supply Voltage	Option Code
+5.0V DC	0
+3.3V DC	3
Enable/Disable	As Standard

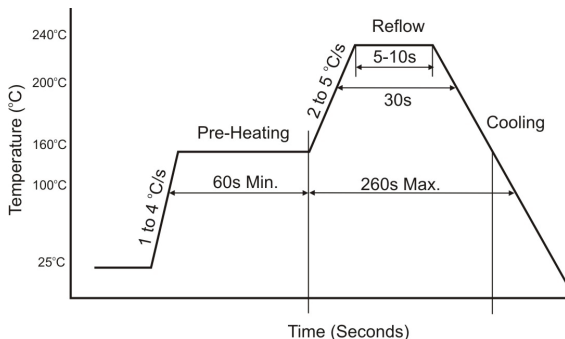
Marking & Specification Code						
Type	Voltage Code	Stability	OTR	Symmetry	Frequency	WWYY
45	0 or 3	B or C	S	N	20.000	1611

Electrical Characteristics Ta = +25°C, <sup>Note1</sup> Inclusive of VDD ±10%, Load Change ±10%, Ageing, Shock & Vibration					
Parameter		Condition	Frequency Range (MHz)	V <sub>DD</sub> = +5.0V	V <sub>DD</sub> = +3.3V
Input Current	I <sub>DD</sub>	All Conditions (See Note)	1.00 to 29.999	20mA Max	15mA Max.
			30.00 to 70.000	40mA Max.	30mA Max.
Frequency Stability	Δf		1.00 to 70.000	See Options Above	
Symmetry	Sym	@50% V <sub>DD</sub> Level	1.00 to 70.000	40/60%	
Output Voltage	V <sub>OL</sub>	"0" Level	1.00 to 150.00	10% V <sub>DD</sub> Max.	
	V <sub>OH</sub>	"1" Level		90% V <sub>DD</sub> Min.	
Rise Time	T <sub>R</sub>	10% to 90% V <sub>DD</sub>	0.50 to 150.00	8nS Max.	5nS Max.
Fall Time	T <sub>F</sub>	90% to 10% V <sub>DD</sub>	0.50 to 150.00	7nS Max.	5nS Max.
Start Up Time	T <sub>S</sub>	0V to V <sub>DD</sub>	0.50 to 150.00	10mS Max.	
Load	TTL Load		1.00 to 70.000	1-10 TTL	1-10 TTL
	HCMOS Load		1.00 to 70.000	30pF Max	15pF Max

**Dimensions (mm)** **1,000pcs/Reel**



**Reflow Solder Profile (240°C)** **Pin Connections**



Pin #	Connection
#1	E/D
#2	Ground
#3	Output
#4	V <sub>CC</sub>

Enable/Disable Function	
Pin 1 Input	Pin 8 Output
Open	Enable O/P
V <sub>IH</sub> ≥ 2.0V DC	Enable O/P
V <sub>IH</sub> < 0.8V DC	Disable O/P