

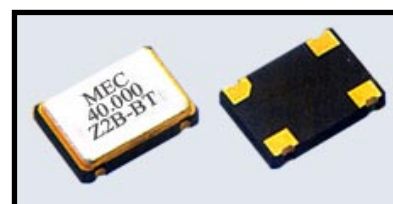
Surface Mount Clock Oscillator

Z Series



Seam Sealed Ceramic 5.0 x 3.2 x 1.0 mm with Tri-State Function

(4 Pads)



Features:

- Industry standard
- Ultra small and thin ceramic package
- Suitable for reflow soldering
- Lower noise and current with reduced power consumption
- Built-in C-MOS IC with tri-state function
- Supply voltage of 5V and 3.3V available
- Custom specs are also available

- RoHs Compliant (Pb Free)

Electrical Specifications:

Parameters	Condition	Z1	Z2	Z3	Z4
Fan Out Type		TTL / CMOS	CMOS	TTL	TTL
Supply Voltage		5.0V	3.3V	5.0V	3.3V
Frequency Range		1.554MHz to 125MHz			
Operating Temperature		-0°C ~ +70°C; -20°C ~ +70°C; -40°C ~ +85°C			
Frequency Range Input Current (max.)	1.544 ~ 31.999MHz (15pF)	35mA max.	25mA max.	30mA max.	25mA max.
	1.544 ~ 31.999MHz (50pF)	40mA max.	-	-	-
	32 ~ 150MHz (15pF)	45mA max.	40mA max.	45mA max.	40mA max.
	32 ~ 150MHz (50pF)	55mA max.	-	-	-
Frequency Stability	All Conditions	± 25ppm, ± 50ppm, ± 100ppm			
Symmetry	AT 1/2 Vdd	40 / 60% Standard (T = 45 / 55% for tight symmetry)			
Output Voltage	Vol (max.)	0.4V/0.5V	0.33V	0.5V	0.33V
	Vol (min.)	2.4V/4.5V	2.97V	4.5V	2.97V
Rise / Fall Time	AT 0.1Vod - 0.9Vod	10ns max.			
Driving Ability	10 LSTTL Load max.	-	-	15 pF	15 pF
	CMOS Load max.	15 pF / 50 pF	15 pF	-	-
	TTL Load max.	10 TTL	-	-	-
Start-up Time	Load Range	10 ms max. (15 pF) / 5 ms (50 pF)			
E/D Function	Pin #1 Open	PIN #3 Active			
	Pin #1 >= 2.2V	PIN #3 Active			
	Pin #1 <= 0.8V	PIN #3 Inactive			
Pad Connection		PIN #1 E/D		PIN #3 Out	
		PIN #2 GND		PIN #4 Vdd	

Part Numbering System:

Z2 B — 25.000 B T

① ② ③ ④ ⑤ ⑥

① Series

Z1: TTL/CMOS, 5.0V
Z2: CMOS, 3.3V
Z3: TTL, 5.0V
Z4: TTL, 3.3V

② Frequency Stability

Frequency Stability
A: ±100 ppm
B: ±50 ppm
D: ±25 ppm

③ Frequency

Frequency
Unit : MHz

5 digits min.

④ Operating Temperature

Code	Ranges
A	-0°C ~ +70°C
B	-20°C ~ +70°C
X	-40°C ~ +85°C

⑤ Output Symmetry

Code	Output Symmetry
Nil	40% / 60%
T	45% / 55%

⑥ Output Load

Code	Output Load
Nil	Standard
000	Custom

Remark: Specifications are subject to change without prior notice. Please confirm with our sales engineer.

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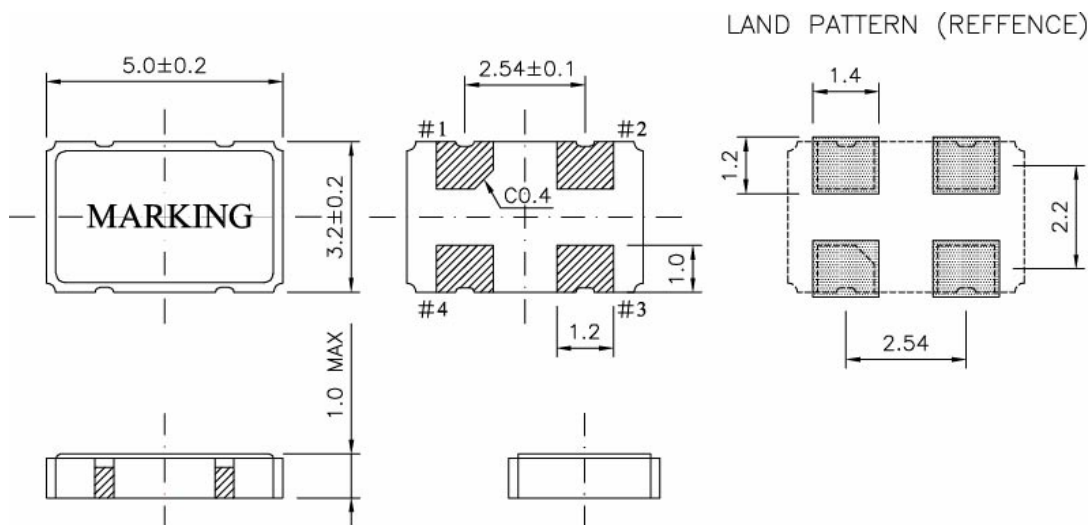
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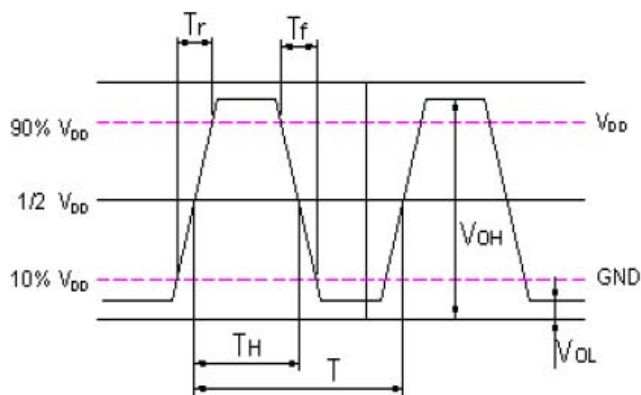


Dimensions:

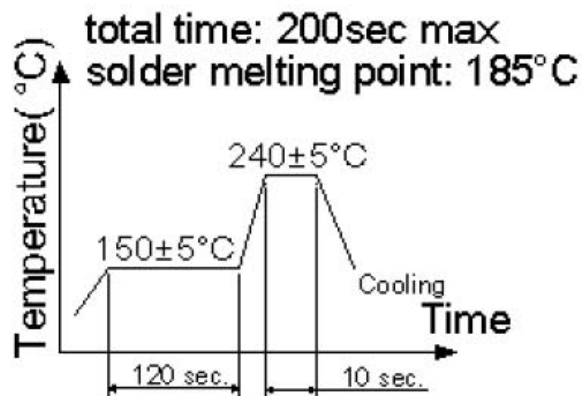


Pin No.	Connection
#1	N.C. (INH)
#2	GND
#3	Output
#4	+VCC

Waveform conditions:



Reflow condition:



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