

Vishay Dale

Half Size Clock Oscillator Enable/Disable



The XO-523 series oscillator is half size, has tri-state enable/disable controlled function, and is with a 3.3 V power supply voltage. The metal package with pin 4 case ground acts as shielding to minimize EMI radiation.

FEATURES

- Size: 8 pin half size
- Industry standard
- Tri-state enable/disable
- Wide frequency range
- Low cost
- Resistance weld package
- 3.3 V
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

Pb-free

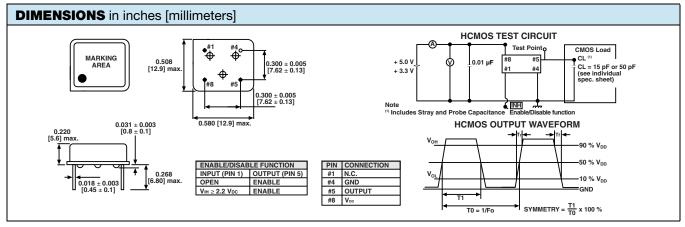
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COMPLIANT HALOGEN

PARAMETER	SYMBOL	CONDITION	VALUE
Frequency range	Fo	-	1.000 MHz to 100.000 MHz
Frequency stability (1)		all conditions	± 25 ppm, ± 50 ppm, ± 100 ppm
Operating temperature range	т	-	0 °C to 70 °C
Operating temperature range	T _{OPR}		- 40 °C to + 85 °C (option)
Storage temperature range	T _{STG}	-	- 55 °C to + 125 °C
Power supply voltage	V _{DD}	-	3.3 V ± 10 %
Aging (first year)		25 °C ± 3 °C	± 5 ppm
		1.000 MHz to 23.999 MHz	15 mA max.
Supply ourrept	I _{DD}	24.000 MHz to 49.999 MHz	20 mA max.
Supply current		50.000 MHz to 69.999 MHz	30 mA max.
		70.000 MHz to 100.000 MHz	45 mA max.
Output symmetry	Sym	at ¹ / ₂ V _{DD}	40 %/60 % (45 %/55 % option)
Rise time	t _r	20 % V_{DD} to 80 % V_{DD}	8 ns max.
Fall time	t _f	80 % V_{DD} to 20 % V_{DD}	8 ns max.
Output voltage	V _{OH}	-	20 mA max. 30 mA max. 45 mA max. 40 %/60 % (45 %/55 % option) 8 ns max. 90 % V _{DD} min. 10 % V _{DD} max.
Output voltage	V _{OL}	-	10 % V _{DD} max.
	TTL load	-	1 TTL to 5 TTL
Output load	HCMOS load	-	to 50M: 30 pF
	HCINIOS IDau	-	to 125M: 15 pF
Start-up time	t _s	-	10 ms max.
Pin 1, tri-state function			pin 1 = H or open (output active at pin 5)
		-	pin 1 = L (high impedance at pin 5)

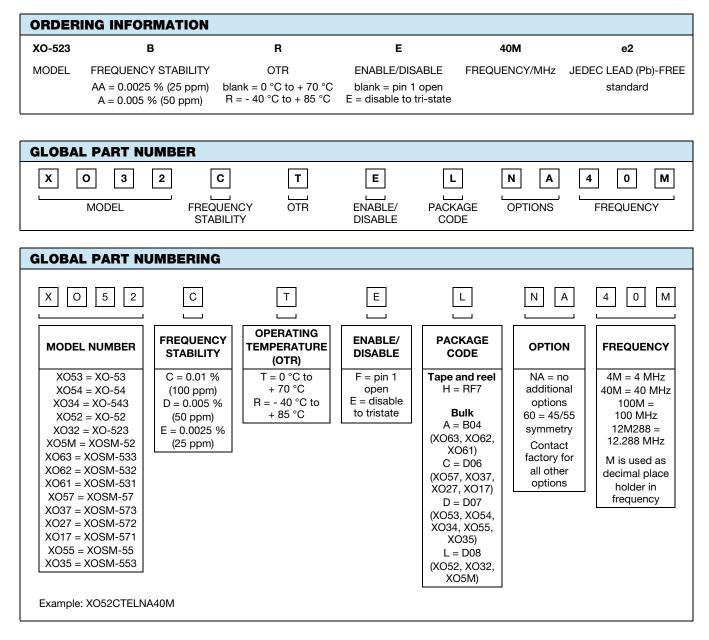
Note

⁽¹⁾ Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock vibration



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PART MARKING			
Line 1:	M2801XXXXX (part number)		
Line 2:	XX.XXXXM (frequency)		
Line 3:	yywwvv (date/factory code)		



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