

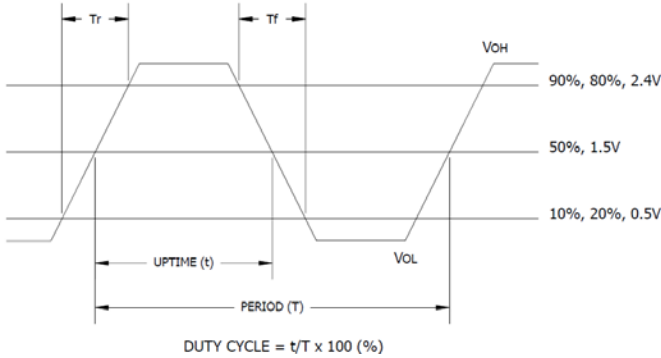
**ELECTRICAL CHARACTERISTICS**

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT	
Maximum Supply Voltage	V <sub>CC</sub>	-	-0.5	-	+7.0	V	
Storage Temperature	T <sub>STG</sub>	-	-40	-	+100	°C	
Frequency Range	f <sub>0</sub>	-	1.5	-	107	MHz	
CB3LV		-	1.5	-	200		
Frequency Stability	Δf/f <sub>0</sub>	See Note 1 and Ordering Information	-	-	20,25,50 or 100	± ppm	
Aging	Δf	First year	-	3	5	± ppm	
Operating Temperature	T <sub>A</sub>	-	-20	25	+70	°C	
Commercial Industrial		-	-40		+85		
Supply Voltage	V <sub>CC</sub>	±10%	4.5	5.0	5.5	V	
CB3 CB3LV			3.0	3.3	3.6		
Supply Current	I <sub>CC</sub>	Frequency Range				mA	
CB3		Tested load condition noted for typical values.					
		1.5MHz to 20MHz	C <sub>L</sub> =50pF	-	10		25
		20.001MHz to 80MHz	C <sub>L</sub> =50pF	-	30		50
CB3LV		80.001MHz to 107MHz	C <sub>L</sub> =15pF	-	40		80
		1.5MHz to 20MHz	C <sub>L</sub> =15pF	-	7		12
	20.001MHz to 80MHz	C <sub>L</sub> =15pF	-	20	40		
Output Load	C <sub>L</sub>	80.001MHz to 200MHz	C <sub>L</sub> =15pF	-	30	pF	
		1.5MHz to 50MHz	-	-	50		
		50.001MHz to 80MHz	-	-	30		
Output Voltage Levels	V <sub>OH</sub> V <sub>OL</sub>	CMOS Load 10 TTL LOAD CMOS TTL Load	90%V <sub>CC</sub> V <sub>CC</sub> -0.6V -	-	-	V	
							Logic '1' Level
Output Current	I <sub>OH</sub> I <sub>OL</sub>	V <sub>OH</sub> = 3.9V/2.2V    V <sub>CC</sub> = 4.5V/3.0V V <sub>OL</sub> = 0.4V            V <sub>CC</sub> = 4.5V/3.0V	-	-	-16/-8 +16/+8	mA	
							Logic '1' Level
Output Duty Cycle	SYM	@ 50% Level	45	-	55	%	
Rise and Fall Time	T <sub>R</sub> , T <sub>F</sub>	@ 10% - 90% Levels				ns	
CB3		Tested load condition noted for typical values.					
		1.5MHz to 20MHz	C <sub>L</sub> =50pF	-	8		10
		20.001MHz to 80MHz	C <sub>L</sub> =50pF	-	5		8
CB3LV		80.001MHz to 200MHz	C <sub>L</sub> =15pF	-	2.5		5
		1.5MHz to 20MHz	C <sub>L</sub> =15pF	-	6		8
	20.001MHz to 80MHz	C <sub>L</sub> =15pF	-	3	5		
80.001MHz to 200MHz	C <sub>L</sub> =15pF	-	1.5	3			
Start Up Time	T <sub>S</sub>	Application of V <sub>CC</sub>	-	-	10	ms	
Enable Function	V <sub>IH</sub> V <sub>IL</sub>	Pin 1 Logic '1', Output Enabled	2.0	-	-	V	
Enable Input Voltage		Pin 1 Logic '0', Output Disabled	-	-	0.8		
Disable Input Voltage	T <sub>PLZ</sub>	Pin 1 Logic '1'	-	-	200	ns	
Enable Time	I <sub>ST</sub>	Pin 1 Logic '0', Output Disabled	-	-	10	μA	
Standby Current	-	-	-	-	50	ps	
Period Jitter, Pk-Pk	-	-	-	-	5		
Period Jitter, RMS	-	-	-	-	1		
Phase Jitter, RMS	-	Bandwidth 12kHz - 20MHz	-	-			

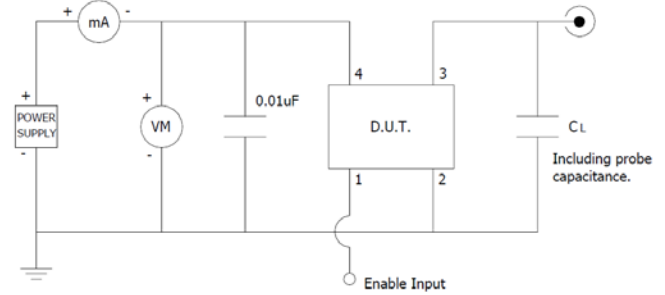
- Notes:  
1. Inclusive of initial tolerance at time of shipment, changes in supply voltage, load, temperature and 1st year aging.

**ELECTRICAL CHARACTERISTICS**

**LVC MOS OUTPUT WAVEFORM**



**TEST CIRCUIT, CMOS LOAD**



**ENABLE TRUTH TABLE**

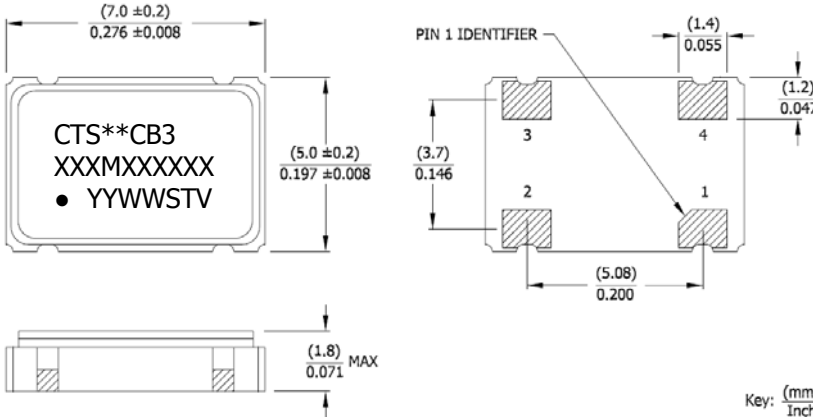
PIN 1	PIN 3
Logic '1'	Output
Open	Output
Logic '0'	High Imp.

**D.U.T. PIN ASSIGNMENTS**

PIN	SYMBOL	DESCRIPTION
1	EOH	Enable
2	GND	Circuit & Package Ground
3	Output	RF Output
4	V <sub>CC</sub>	Supply Voltage

**MECHANICAL SPECIFICATIONS**

**PACKAGE DRAWING**



**MARKING INFORMATION**

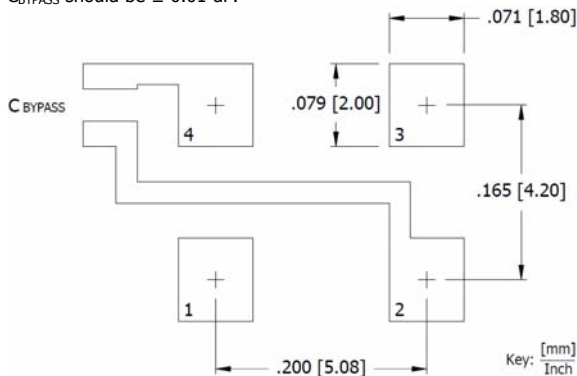
- \*\* – Manufacturing Site Code.  
[Note a dash may follow the site code and is acceptable.]
- XXXMXXXXXX – Frequency is marked with only leading significant digits before the 'M' and 4 – 6 digits after the 'M' (including zeros).  
Ex. XMXXXXXX [3M579545]  
XXMXXXXX [14M31818]  
XXXMXXXX [125M0000]
- YYWW – Date code, YY – year, WW – week.
- ST – Frequency stability/temperature code.  
[Refer to Ordering Information.]
- V – Voltage code. 3 = 3.3V, 5 = 5.0V.

**NOTES**

- Termination pads [e4]. Barrier-plating is nickel [Ni] with gold [Au] flash plate.
- Reflow conditions per JEDEC J-STD-020, 260°C maximum.
- Moisture Sensitivity Level 1 per JEDEC J-STD-020.

**SUGGESTED SOLDER PAD GEOMETRY**

C<sub>BYPASS</sub> should be ≥ 0.01 uF.



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## CTS:

[CB3-3C-49M152000](#) [CB3-3C-32M768000](#) [CB3LV-3C-4M000000](#) [CB3LV-3C-29M491200](#) [CB3-3C-44M736000](#)  
[CB3LV-3C-24M000000](#) [CB3-3C-33M333000](#) [CB3LV-3C-10M000000](#) [CB3LV-3C-16M384000](#) [CB3-3C-12M000000](#)  
[CB3LV-3C-20M480000](#) [CB3-3C-40M000000](#) [CB3-3C-14M318180](#) [CB3LV-3C-20M000000](#) [CB3LV-3C-1M843200](#)  
[CB3LV-3C-30M000000](#) [CB3-3C-3M686400](#) [CB3-3C-18M432000](#) [CB3LV-3C-60M000000](#) [CB3-3C-72M000000](#) [CB3-](#)  
[3C-51M840000](#) [CB3LV-3C-19M440000](#) [CB3LV-3C-51M840000](#) [CB3-3C-6M176000](#) [CB3LV-3C-16M000000](#) [CB3-3C-](#)  
[66M666600](#) [CB3-3C-15M360000](#) [CB3LV-3C-32M768000](#) [CB3-3C-4M000000](#) [CB3LV-3C-14M318180](#) [CB3-3C-](#)  
[45M000000](#) [CB3-3C-20M000000](#) [CB3-3C-60M000000](#) [CB3-3C-10M000000](#) [CB3LV-3C-45M000000](#) [CB3-3C-](#)  
[20M480000](#) [CB3LV-3C-80M000000](#) [CB3LV-3C-15M360000](#) [CB3LV-3C-66M666600](#) [CB3-3C-32M000000](#) [CB3LV-](#)  
[3C-33M333000](#) [CB3-3C-7M372800](#) [CB3LV-3C-7M372800](#) [CB3LV-3C-12M000000](#) [CB3LV-3C-18M432000](#) [CB3LV-](#)  
[3C-24M704000](#) [CB3LV-3C-3M686400](#) [CB3LV-3C-12M352000](#) [CB3LV-3C-6M176000](#) [CB3LV-5I-20M0000](#) [CB3LV-3I-](#)  
[33M0000](#) [CB3LV-3I-24M5760](#) [CB3LV-3I-125M0000](#) [CB3LV-3I-66M0000](#) [CB3LV-3I-33M3333](#) [CB3LV-3I-27M0000](#)  
[CB3LV-3I-48M0000](#) [CB3LV-3I-100M0000](#) [CB3-3I-7M3728](#) [CB3-3I-1M8432](#) [CB3LV-3I-51M8400](#) [CB3LV-3I-3M6864](#)  
[CB3-3I-24M7040](#) [CB3-3I-16M0000](#) [CB3LV-3I-1M8432](#) [CB3LV-3I-24M7040](#) [CB3LV-3I-49M1520](#) [CB3-3I-18M4320](#)  
[CB3LV-3I-1M5440](#) [CB3LV-3I-20M0000](#) [CB3LV-3I-7M3728](#) [CB3-3I-32M7680](#) [CB3-3I-32M0000](#) [CB3LV-3I-14M31818](#)  
[CB3-3I-72M0000](#) [CB3LV-3I-6M1760](#) [CB3LV-3I-80M0000](#) [CB3-3I-8M0000](#) [CB3LV-3I-29M4912](#) [CB3LV-3I-60M0000](#)  
[CB3-3I-6M1760](#) [CB3-3I-15M3600](#) [CB3LV-3I-45M0000](#) [CB3LV-3I-8M0000](#) [CB3-3I-12M3520](#) [CB3-3I-12M2880](#)  
[CB3LV-3I-15M3600](#) [CB3LV-3I-66M6666](#) [CB3LV-3I-19M4400](#) [CB3LV-3I-64M0000](#) [CB3LV-3I-24M0000](#) [CB3LV-3I-](#)  
[16M3840](#) [CB3LV-3I-40M0000](#) [CB3LV-3I-33M3330](#) [CB3-3I-29M4912](#) [CB3-3I-25M0000](#) [CB3-3I-49M1520](#) [CB3-3I-](#)  
[10M0000](#) [CB3LV-3I-16M0000](#) [CB3-3I-24M0000](#)