DIFFERENTIAL OSCILLATOR

DO53A SERIES

Features

- External dimensions: 5.0×3.2×1.4mm
- Low power supply voltage:3.3V,2.5V and 1.8v supply options
- Clock output:LVpecl,LVDS,CML,HCSL and LVCMOS
- Tri-state enable/disable mode
- Output frequency support from 15MHz to 2.1Ghz
- SONET/SDH,Gigabit Ethernet,Storage area networking,SD/HD video,FPGA clock generation

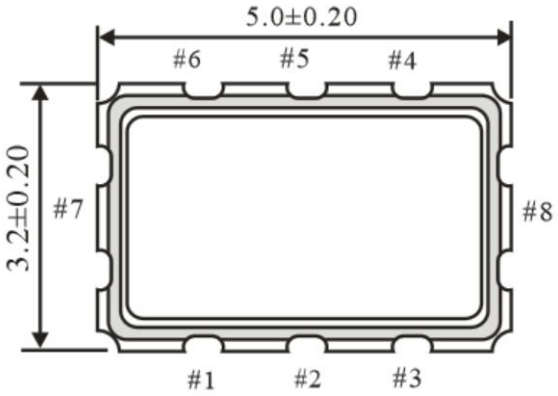
Specifications

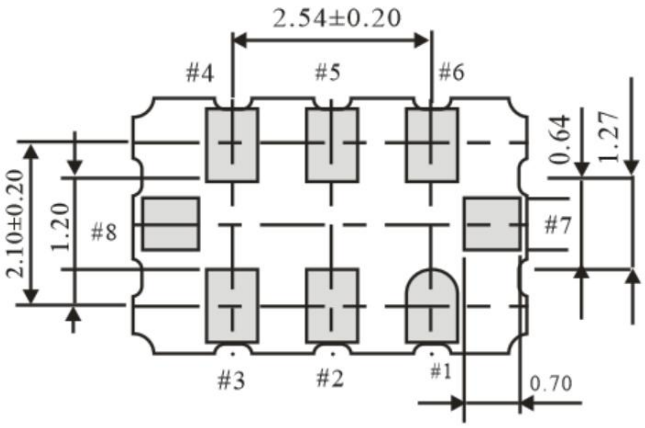
Parameter		LVPECL				Unit
		3.3V		2.5V		
		Min.	Max.	Min.	Max.	
Supply Voltage Variation(V_{DD}）±10%		VDD-10%	VDD+10%	VDD-10%	VDD+10%	V
Frequency Range		15	2100	15	2100	MHz
Standard Frequency		100/106.25/125/156.25/187.5/212.5/266/300/312.5/400/491.52/622.08/644.531250				
Supply Current		-	110	-	95	mA
Output Level	Output High	VDD-1.165	VDD-0.8	VDD-1.165	VDD-0.8	V
	Output Low	VDD-2.0	VDD-1.55	VDD-2.0	VDD-1.55	
Transition Time:（-20%~80%）	Rise Time	-	0.35	-	0.35	nSec
	Fall Time	-	0.35	-	0.35	
Start Time		-	8	-	8	mSec
Duty Cycle		44	55	45	55	%
Tri-state mode	(Input to pin2)					
	Enable	0.7*VDD	-	0.7*VDD	-	V
	Disable	-	0.3*VDD	-	0.3*VDD	
Stand by Current		-	110	-	95	
Phase Noise		Typ.	Max.	Typ.	Max.	
At V_{DD}=3.3V,fout=873.515MHz	1KHz offset	-106	-	-106	-	dBc/ Hz
	10KHz offset	-115	-	-115	-	
	100KHz offset	-123	-	-123	-	
	1MHz offset	-133	-	-133	-	
	20MHz offset	-150	-	-150	-	
RMS Phase Jitter(12KHz to 20MHz)		150	300	150	300	Fs
Period Jitter		-	50	-	50	Ps

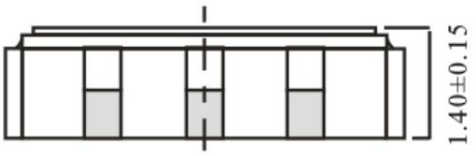
DO53A SERIES

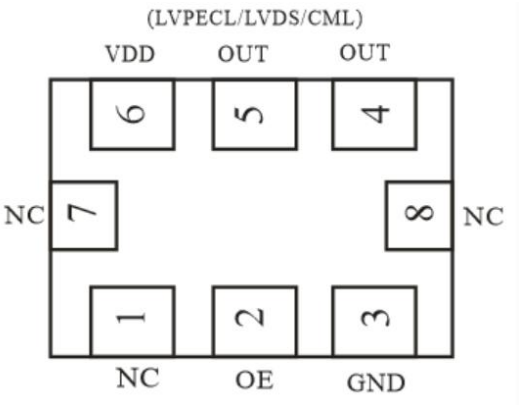
Dimensions

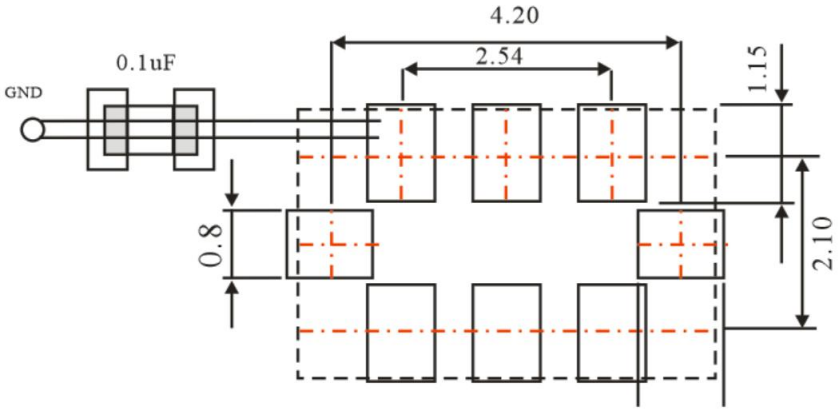
(Unit:mm)

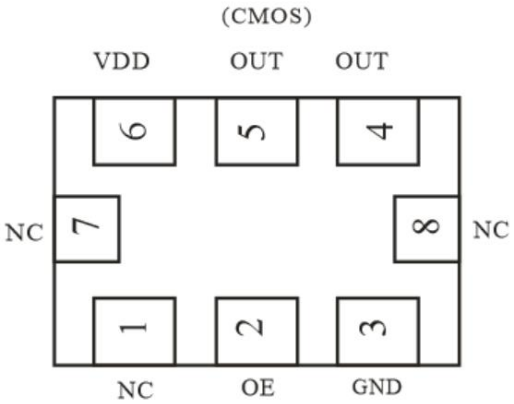












pin	Function	
	LVPECL/LVDS/CML/HCSL	CMOS
1	NC	NC
2	OE	OE
3	GND	GND
4	Output	Output
5	Comp. Output	NC
6	V_{DD}	V_{DD}
7	NC	NC
8	NC	NC