Hosonic

SMD Crystal Oscillators

D3SP Series 3.2×2.5×1.2mm



Features

- PECL output
- Low Jitter and Noise

Applications

- Fiber-optic communication
- FTTH and SONET/SDH
- Server, FCHBA
- Gigabit Ethernet, Serial ATA

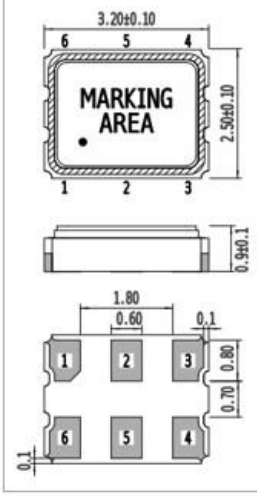
Electrical Specifications

Item	Symbol	Condition	D3SP		
Frequency Range	f_{nom}	-	25 ~ 212.5MHz		
Output Type	-	-	LV_PECL		
Output Load	-	-	50Ω (V_{DD}-2V)		
Frequency Stability*	f_{stb}	All Condition*	±50ppm, or specify		
Operating Temperature Range	T_{opr}	-	-40 ~ +85℃, or specify		
Storage Temperature Range	T_{stg}	-	-40 ~ +85℃		
Power Supply Voltage	V_{DD}	-	3.3V±5%, 2.5V±5% Option		
Supply Current	I_{DD}	-	65mA max.		
Rise Time / Fall Time	T_r/T_f	20%V_{PP} ~ 80%V_{PP}	<100M	≥100MHz	
			0.5ns max.	0.35ns max.	
Output Voltage	V_{OH}	-	V_{DD} - 1.025V min.		
	V_{OL}	-	V_{DD} - 1.62V max.		
Output Symmetry	SYM	At 1/2 V_{PP}	45% ~ 55%		
Stand-by Current	Ist	-	30μA max.		
Start-up time	-	-	10ms max.		
Aging (At 25℃)	-	-	±3ppm / year max.		
Phase Jitter (<40MHz:12kHz ~ 5MHz ≥40MHz:12kHz ~ 20MHz)	-	-	<100M	100~148M	>148M
			1ps max.	150fs max.	70fs max.
Pin 1, Enable/Disable function	E/D	-	Pin 1="High" or "open".....output active at pin 4.5 Pin 1="Low".....high impedance at pin 4.5		

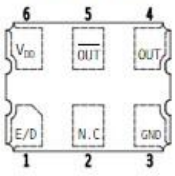
* Include : 25℃ tolerance, operating temperature range, input voltage change, aging, load change.

Mechanical Dimensions

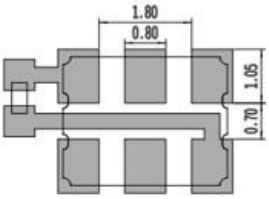
Unit: (mm)



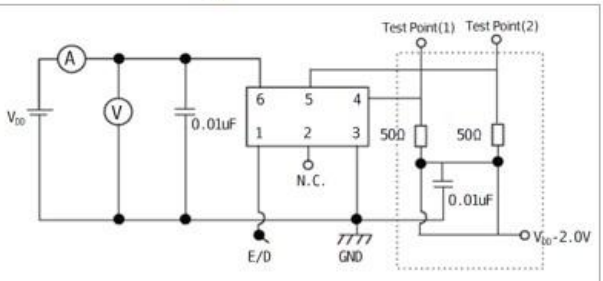
Pin Connection (Top View)



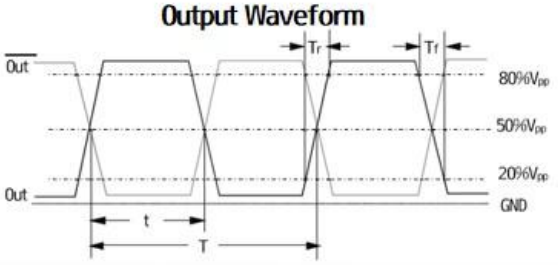
Recommended PAD Layout



Test circuit & Output Waveform



Output Waveform



** 0.01uF bypass capacitor should be placed between V_{DD} (pin 6) and GND (pin 3) to minimize power supply line noise.

深圳市满度科技有限公司
Web:www.manduic.com
Tel:150-1290-5940
Email:sales@manduic.com

微信扫码咨询客服