

# SMD CRYSTAL OSCILLATOR



#### • D7ST Series 7.0\*5.0 LVDS OSC



### **FEATURES**

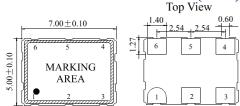
- 7.0\*5.0\*1.8mm package
- Tri-State function available
- Low Jitter and Noise
- LVDS output
- Ideal for Fiber-optic communication applications, FTTH and SONET/SDH applications, Sever, FCHBA, Fibre Channel, Gigabit Ethernet, and Serial ATA

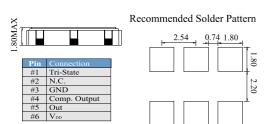
## **Electrical Specifications**

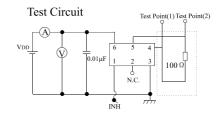
Brezzeter			D70	YT.
Parameter	TO	Condition	D7ST	
Frequency Range	F0		25~156.25MHz	
Output Specification			LVDS	
Frequency Stability*		All Condition	$\pm 25$ ppm, $\pm 50$ ppm, $\pm 100$ ppm	
Operating Temperature Range	Topr		-20°C~+70°C(-40°C~+85°C option)	
Storage Temperature Range	Tstg		-55°C~+125°C	
Power supply Voltage	$V_{\mathrm{DD}}$		3.3V+/-5%	2.5V+/-5%
Supply Current	$I_{\mathrm{DD}}$		80mA Max	
Output Symmetry	Sym	At ½Vpp	40/60%(45/55% Option)	
Rise time	$T_{\rm r}$	20%Vpp~80%Vpp	1nS Max	
Fall Time	$T_{\mathrm{f}}$	80%Vpp~20%Vpp	1nS Max	
Output Voltage	$V_{\mathrm{OH}}$		1.4V Typ.	
	$V_{OL}$		1.1V Typ.	
Differential output voltage	$V_{\text{OD}}$		350mV Typ.	
Differential output error	$\triangle V_{\text{OD}}$		40mV Typ.	
Offset voltage	Vos		1.25V Typ.	
Offset error	$\triangle Vos$		50mV Typ.	
Output Load			100 Ω Ouput -	comp. output
Integrated phase jitter (RMS)		Integrated 12KHz to 20MHz	1pS Max	
Start Time	Ts		10mS Max	
Aging(First Year)		25℃ ±3℃	±2ppm Max	
Pin 1,tri-state function			Pin 1=H or openOutput active at pin 4,5	
r iii 1,iii-state function			Pin 1=Lhigh impedance at pin 4,5	
Packing Unit		1000pcs/reel		

<sup>\*</sup>Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

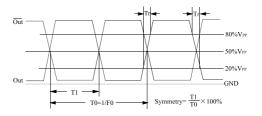
# **Mechanical Dimensions(mm)**







Output Waveform



<sup>\*\*</sup>Note: 0.01uF bypass capacitor should be placed between Vdd(Pin6) and GND(Pin3) to Minimize power supply line noise

#### TAIWAN:

HOSONIC ELECTRONIC CO., LTD. 23-1 LANE 84. CHUN YING ST. SHULIN CHEN. TAIPEI 23804. TAIWAN WEB SITE:http://www.hosonic.com



**CHINA:** HANGZHOU HOSONIC ELECTRONIC CO., LTD.

NO.242 LIANGBO ROAD. LIANGZHU TOWN. YUHANG DISTRICT, HANGZHOU, ZHEJIANG, CHINA

WEB SITE:http://www.hosonic.com



26