

# SMD CRYSTAL OSCILLATOR



## •D1SX Series 2.0\*1.6 OSC



#### **FEATURES**

- 2.0X1.6X0.8 Miniature Package
- Tri-State Enable/Disable
- TTL/CMOS compatible
- Home security devices, power saving application, and low frequency specification circuit design looking for a smaller package
- 3.3V, 2.8V(2.5V), 1.8V option

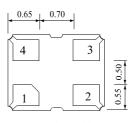
### **Electrical Specifications**

Parameter		Condition		D1SX	
Frequency Range	F0		1~60MHz		
Frequency Stability*	Frequency Stability*		$\pm$ 25ppm, $\pm$ 50ppm, $\pm$ 100ppm		
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+/-10%	2.8V+/-10%	1.8V+/-10%
Supply Current	Ірр	1.000MHz to 9.999MHz	8mA Max	7mA Max	6mA Max
		10.000MHz to 34.999MHz	10mA Max	8mA Max	7mA Max
		35.000MHz to 49.999MHz	25mA Max	20mA Max	15mA Max
		50.000MHz to 54.000MHz	35mA Max	30mA Max	25mA Max
Output Symmetry	Sym	At 1/2Vdd	40/60%(45/55% Option)		
Rise time	Tr	10%Vdd~90%Vdd	5 nS Max	6 nS Max	7 nS Max
Fall Time	$T_{\rm f}$	90%Vdd~10%Vdd	5 nS Max	6 nS Max	7 nS Max
Output Voltage	$V_{\mathrm{OH}}$		90% Vdd Min		
	$V_{OL}$		10% Vdd Max		
Output Load HCMOS Load	l		15pF Typ.		
Start Time	Ts		10mS Max		
Stard-by Function			Yes		
Aging(First Year)	•	25℃±3℃	±2ppm Max		
Pin 1,tri-state function			Pin 1=H or openOutput active at pin 3		
i ii i,iii state idiletion			Pin 1=Lhigh impedance at pin 3		

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

### **Mechanical Dimensions(mm)**





Top View



Recommended Solder Pattern

0.85	0.50	0.85	
			0.75
			30
			75 9
			0

<sup>\*\*</sup>Note: 0.01uF bypass capacitor should be placed between Vdp(Pin4) and GND(Pin2) to Minimize power supply line noise