

## SMD CRYSTAL OSCILLATOR



### • D5SX Series



#### **5032 OSC**

#### **FEATURES**

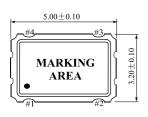
- 5.0X3.2X1.3mm Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Home security devices, networking, and base station applications
- 3.3V, 2.8V(2.5V), 1.8V option

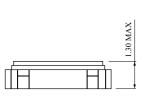
#### **Electrical Specifications**

Parameter		Condition	D5SX		
Frequency Range	F0		1~156.25 MHz		
Frequency Stability*		All Condition	±25ppm, ±50ppm, ±100ppm		
Operating Temperature Range	Topr		-20°C~+70°C (-40°C~+85°C option)		
Storage Temperature Range	Tstg		-55℃~+125℃		
Power supply Voltage	$V_{ m DD}$		3.3V+/-10%	2.8V+/-10%	1.8V+/-10%
Supply Current		1MHz to 9.999MHz	8mA Max	7mA Max	6mA Max
	Idd	10MHz to 34.999MHz	10mA Max	8mA Max	7mA Max
	100	35MHz to 49.999MHz	25mA Max	20mA Max	15mA Max
		50MHz to 156.25MHz	35mA Max	30mA Max	25mA Max
Output Symmetry	Sym	At 1/2V <sub>DD</sub>	40/60%(45/55% Option)		
Rise time	Tr	10%Vdd~90%Vdd	5 nS Max	6 nS Max	7 nS Max
Fall Time	$T_{\mathrm{f}}$	$90\%\mathrm{V}_{\mathrm{DD}}{\sim}10\%\mathrm{V}_{\mathrm{DD}}$	5 nS Max	6 nS Max	7 nS Max
Output Voltage	$V_{\mathrm{OH}}$		90% Vdd Min		
	$V_{OL}$		10% V <sub>DD</sub> Max		
Output Load HCMOS Load			15pF Typ.		
Start Time	Ts		10mS Max		
Stand-by Function			Yes		
Aging(First Year)		25℃±3℃	±2ppm Max		
Pin 1,tri-state function			Pin 1=H or openOutput active at pin 3		
Tim 1, ar state function			Pin 1=Lhigh impedance at pin 3		
Packing Unit			1000pcs/reel		

<sup>\*</sup>Include:  $25^\circ\mathbb{C}$  tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

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

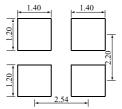




# 2.54

Top View

#### Recommended Solder Pattern



# Pin Connection #1 Tri-State #2 GND #3 Output #4 VDD

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