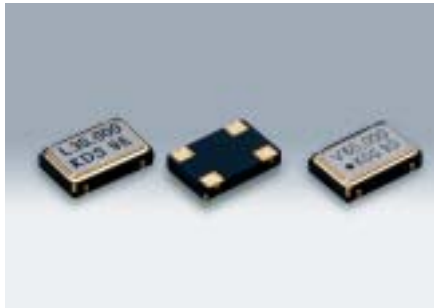


# SMD Type Crystal Oscillators

## DS0751S SERIES Low Voltage Type



Actual size

### ■ Features

- Miniature SMD-SPXO with outside dimensions 7.3×4.9×1.7.
- DS0751SL is 3V drive and low current consumption (7.4MHz to 30MHz). Suitable for battery drive.
- DS0751SV is 3.3V drive and high speed (0.5MHz to 120MHz). For visual equipment,  $\Delta f/F_o \leq \pm 30 \times 10^{-6}$  is available. 28.636MHz, 28.375MHz, 14.318MHz.

### ■ Applications

- PC, peripheral equipment and visual equipment.

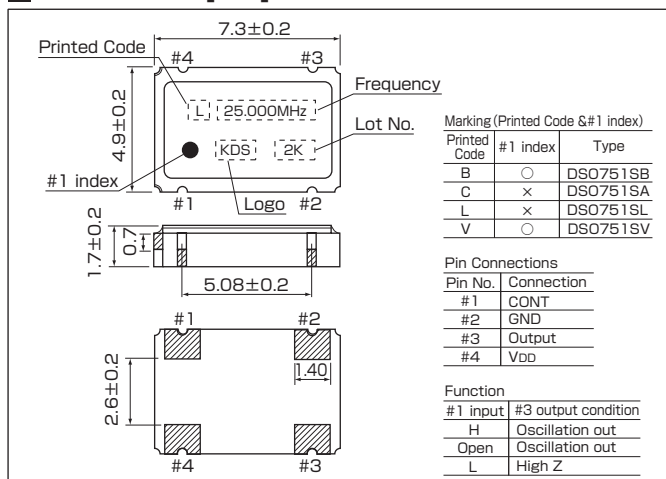
### ■ Generic Specification

Item	Type	Legend	DS0751SL	DS0751SV	Condition
Generic Characteristics	Output Frequency Range	F <sub>o</sub>	7.4~30MHz / 7.4~35MHz (V <sub>DD</sub> =+3.0V / V <sub>DD</sub> =+5.0V)	0.5MHz~120MHz	
	Frequency Stability	$\Delta f/F_o$	$\pm 50 \times 10^{-6}$ , $\pm 100 \times 10^{-6}$		-10~+70°C. Includes frequency tolerance at room temperature.
	Supply Voltage	V <sub>DD</sub>	+3.0V±0.3V / +5.0V±0.5V	+3.3V±0.3V	
	Operating Temperature Range	T <sub>OPR</sub>	-10°C~+70°C		
	Current Consumption 1	I <sub>DD1</sub>	8mA max. (V <sub>DD</sub> =+3.0V) 15mA max. (V <sub>DD</sub> =+5.0V)	25mA max. (F <sub>o</sub> ≤67MHz) 45mA max. (67MHz<F <sub>o</sub> ≤100MHz) 60mA max. (F <sub>o</sub> >100MHz)	When no load is applied.
	Current Consumption 2 (1 pin, "L"Level)	I <sub>DD2</sub>	150μA max. (V <sub>DD</sub> =+3.0V) 300μA max. (V <sub>DD</sub> =+5.0V)	20μA max.	SL: Output "L" level SV: High impedance output.
Output Characteristics	Output Disable Time	T <sub>PLZ</sub>	5msec. max.	100nsec. max.	
	Output Enable Time	T <sub>PZL</sub>	5msec. max.		
	Symmetry of Wave Form	Symmetry	40~60%	45~55% (F <sub>o</sub> ≤10MHz) 40~60% (F <sub>o</sub> >10MHz)	V <sub>DD</sub> ×0.5 Level
	Rise and Fall Time	T <sub>r</sub> , T <sub>f</sub>	18nsec. max. (V <sub>DD</sub> =+3.0V) 15nsec. max. (V <sub>DD</sub> =+5.0V)	10nsec. max. (F <sub>o</sub> ≤50MHz) 7nsec. max. (50MHz<F <sub>o</sub> ≤67MHz) 5nsec. max. (F <sub>o</sub> >67MHz)	V <sub>DD</sub> ×0.1~V <sub>DD</sub> ×0.9
	"0"Level	V <sub>oL</sub>	V <sub>DD</sub> ×0.1 max.		
	"1"Level	V <sub>oH</sub>	V <sub>DD</sub> ×0.9 min.		
	Load Condition(TTL)	N	5LS-TTL max.	-	SL: R <sub>L</sub> =3kΩ. (V <sub>DD</sub> =+5.0V)
	Load Condition(C-MOS)	CL	15pF max.	30pF max. (F <sub>o</sub> ≤100MHz) 15pF max. (F <sub>o</sub> >100MHz)	
Input Characteristics	Input Voltage Level	V <sub>IL</sub> / V <sub>IH</sub>	V <sub>IL</sub> =+0.8V max. / V <sub>IH</sub> =+2.0V min.	V <sub>IL</sub> =+0.6V max. / V <sub>IH</sub> =+2.3V min.	
	Input Current	I <sub>IL</sub> / I <sub>IH</sub>	I <sub>IL</sub> =-150μA max. at V <sub>DD</sub> =+3.0V I <sub>IL</sub> =-300μA max. at V <sub>DD</sub> =+5.0V I <sub>IH</sub> =+100μA max.	I <sub>IL</sub> =-100μA max. / I <sub>IH</sub> =+100μA max.	

Packing Unit : 1000pcs./reel ( φ 254)

Consult our sales representative for other specifications.

### ■ Dimensions [mm]



### ■ Recommended Land Pattern

[mm]

