



SPV-10, SLV-10



SPV-02, SLV-02

# VCXO

## SPV-10, SPV-02, SLV-10, SLV-02

- Ceramic SMD package or Metal Package
- 3.3 & 2.5V supply voltage
- Differential LVPECL or LVDS output
- FUND or MULTI
- Stability to  $\pm 20$ ppm
- Tri-state function available
- Reflow soldering is possible
- Available on tape and reel

### LVPECL & LVDS TYPE

### ELECTRICAL SPECIFICATIONS

Output	LVPECL	LVDS	LVPECL	LVDS
Frequency Range	19.000 ~ 77.760MHz(FUND)		77.761 ~ 300.000MHz(MULTI)	
Operating Temperature Range	0 to +70°C or -40 to +85°C			
Storage Temperature Range	-55 ~ +125°C			
Frequency Stability	$\pm 20, \pm 30, \pm 50, \pm 100$ ppm			
Supply Voltage	2.5, 3.3V <sub>DC</sub> $\pm 5\%$		3.3V <sub>DC</sub> $\pm 5\%$	
Input Current	65(2.5V), 80mA(3.3V) max. 45(2.5V), 55(3.3V)mA max.		80mA max.	55mA max.
Frequency Deviation / Pin 1 Control Voltage	$\pm 80$ ppm, $\pm 100$ ppm(STD), 1.65 $\pm$ 1.35V (or 1.65V)		$\pm 80$ ppm, $\pm 100$ ppm(STD), 1.65 $\pm$ 1.35V (or 1.65V)	
Linearity	$\pm 20, \pm 15, \pm 10\%$			
Duty Cycle	50% $\pm 5\%$ (50% of Waveform)			
Output Voltage Logic Low	V <sub>DD</sub> - 1.620 V max.	1.1 V max.	V <sub>DD</sub> - 1.620 V max.	1.1 V max.
Output Voltage Logic High	V <sub>DD</sub> - 1.025 V min.	1.4 V min.	V <sub>DD</sub> - 1.025 V min.	1.4 V min.
Output Differential Voltage	247 ~ 454mV, 350mV typ.		247 ~ 454mV, 350mV typ.	
Offset Voltage	1.125 ~ 1.375V, 1.2V typ.		1.125 ~ 1.375V, 1.2V typ.	
Rise / Fall Time	700ps typ., 1.5ns max. (20~80% waveform)		700ps typ., 1.5ns max. (20~80% waveform)	
Duty Cycle	50 $\pm$ 10% (STD), 50 $\pm$ 5% (Optional)		50 $\pm$ 10% (STD), 50 $\pm$ 5% (Optional)	
Output load	V <sub>DD</sub> - 2.0V <sub>DC</sub> 50 $\Omega$	100 $\Omega$ Differential load	V <sub>DD</sub> - 2.0V <sub>DC</sub> 50 $\Omega$	100 $\Omega$ Differential load
OE High	0.7V <sub>DD</sub> min.			
OE Low	0.3V <sub>DD</sub> min.			
Pin 2 Tri-state	Enable Low Disable High No Connection(default)	Enable High Disable Low No Connection(default)	Enable Low Disable High No Connection(default)	Enable High Disable Low No Connection(default)
Aging (at 25°C)	$\pm 3$ ppm/year max.			
Start-up Time	10ms max.		10ms max.	
Phase Jitter	1ps max. (12kHz to 20MHz)		4ps max. (12kHz to 20MHz)	

### MECHANICAL DIMENSIONS

