

LVDS/ 3.3V or 2.5V/ 3.2×2.5mm



RoHS Compliant

**Features**

- Miniature ceramic package
- Highly reliable with seam welding
- LVDS output
- Supply voltage Vcc = 3.3V, 2.5V
- ±25×10<sup>-6</sup> available
- Low Phase Noise

**Table 1**

Freq. Tol. Code	Tol. × 10 <sup>-6</sup>	Operating Temperature Range (°C)	Note
0	± 50	0 to +70	Standard specifications
S	± 30		
U	± 25	-40 to +85	Please contact us for available frequencies.
F	±100		
G	± 50		
6	± 50		

**How to Order**

KC3225L 125.000 L □ □ J 00  
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (LVDS)
- ④ Supply Voltage (3 : 3.3V or 2 : 2.5V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function  
 J : 45/ 55%, Stand-by
- ⑦ Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 2000 pcs./ reel)

**Specifications**

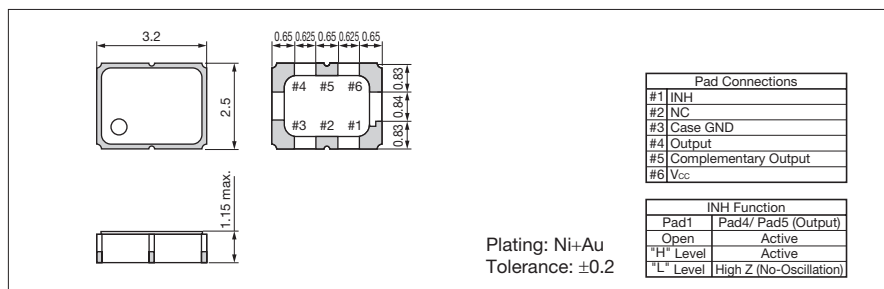
Item	Symbol	Conditions	Specifications		Units	
			KC3225L-L2	KC3225L-L3		
Output Frequency Range <sup>Note1</sup>	f <sub>o</sub>		25 to 175		MHz	
Frequency Tolerance	f <sub>tol</sub>	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	±50/ -40 to +105°C		ppm	
			±100/ -40 to +85°C			
			±50/ -40 to +85°C			
			±50/ 0 to +70°C			
			±30/ 0 to +70°C			
Storage Temperature Range	T <sub>stg</sub>		-55 to +125		°C	
Operating Temperature Range	T <sub>use</sub>	Standard Specifications Extend (Option)	0 to +70/ -40 to +85		°C	
			-40 to +105			
Max. Supply Voltage	—		-0.5 to +5.0		V	
Supply Voltage	V <sub>cc</sub>		+2.375 to +2.625	+2.97 to +3.63	V	
Current Consumption	I <sub>cc</sub>		50 max.		mA	
Stand-by Current	I <sub>std</sub>		20 max.		μA	
Symmetry	SYM	100ohm @crossing point	50±5		%	
Rise/ Fall Time (20% V <sub>cc</sub> to 80% V <sub>cc</sub> Maximum Loaded)	tr/ tf	100ohm	0.6 max.		ns	
Low Level Output Voltage <sup>Note2</sup>	V <sub>OL</sub>		0.9 min. Typ.:1.1		V	
High Level Output Voltage <sup>Note2</sup>	V <sub>OH</sub>		1.6 max. Typ.:1.43		V	
Differential Output Voltage <sup>Note2</sup>	V <sub>OD</sub>		247 to 454 Typ.:330		mV	
Differential Output Voltage Error <sup>Note2</sup>	dV <sub>OD</sub>	dV <sub>OD</sub> =  V <sub>OD1</sub> - V <sub>OD2</sub>	50 max.		mV	
Offset Voltage	V <sub>OS</sub>		1.125 to 1.375		V	
Offset Voltage Error	dV <sub>OS</sub>	dV <sub>OS</sub> =  V <sub>OS1</sub> - V <sub>OS2</sub>	50 max.		mV	
Output Load	R <sub>L</sub>	LVDS Output	100		ohm	
Input Voltage Range	V <sub>IN</sub>		0 to V <sub>cc</sub>		V	
Low Level Input Voltage	V <sub>IL</sub>		30% V <sub>cc</sub> max.		V	
High Level Input Voltage	V <sub>IH</sub>		70% V <sub>cc</sub> min.		V	
Disable Time	t <sub>dis</sub>		200 max.		ns	
Enable Time	t <sub>ena</sub>		10 max.		ms	
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	10 max.		ms	
Deterministic Jitter	DJ	Measured with Wavecrest SIA-3000	2 max.		ps	
1 Sigma Jitter	J <sub>sigma</sub>		4 max.		ps	
Peak to Peak Jitter	J <sub>PK-PK</sub>		30 max.		ps	
Phase Jitter	J <sub>Phase</sub>	@156.25MHz V <sub>cc</sub> = 3.3V	BW : 12kHz to 20MHz	0.3 max.	ps	
				@10Hz offset		Typ. -77
				@100Hz offset		Typ. -103
				@1kHz offset		Typ. -133
				@10kHz offset		Typ. -143
				@100kHz offset		Typ. -149
				@1MHz offset		Typ. -149
@10MHz offset	Typ. -154					
Phase Noise	—	@156.25MHz V <sub>cc</sub> = 3.3V		Typ. -77	dBc/ Hz	
				Typ. -103		
				Typ. -133		
				Typ. -143		
				Typ. -149		
				Typ. -154		

Note : All electrical characteristics are defined at the maximum load and operating temperature range.

Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions. Note2: DC characteristic

**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)

