

# **CRYSTAL OSCILLATORS**

# L D32

## **SMAN-221 SERIES**

CERAMIC PACKAGE For 32,768KHz

### **Applications**

DVR

- Wireless
- Camera
- Communcation
- Medical
- Telecom
- Industry Control
- IoT

Features

- Seam Seal
- Low Power Consumption
- Excellent Solderability
- RoHS Compliant

Actual Size:

■ Tri-State

### **Specification**

### MODEL

MODEL					
FREQUENCY RANGE	Hz	32.768K			
FREQUENCY STABILITY*	ppm	± 20 ~ ± 100			
OPERATING TEMPERATURE	°C	- 20 ~ + 70 Or Specify ( - 40 ~ + 125 is available)			
STORAGE TEMPERATURE	°C	- 55 ~ + 125			
POWER SUPPLY VOLTAGE	VDC	+1.8 ± 5%	+2.5 ± 5%	+3.3 ± 10%	+1.62 ~ +3.63
OUTPUT LEVEL		CMOS			
OUTPUT SYMMETRY**	%	40 ~ 60 (at 50% VDC)			
INPUT CURRENT	mA(Max.)	1.5	2.5	3.5	3.5
RISE/FALL TIME	ns(Max.)	50			
OUTPUT LOAD		15 pF Max.			
AGING	ppm/Year	± 3			

<sup>\*</sup>Inclusive of 25°C±3°C & Operating Temperature Range.

### **Pin Connection**

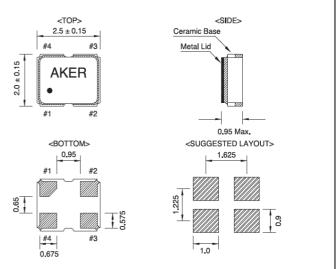
PIN No.	Connection
#1	Enable/Disable
#2	GND
#3	Output
#4	VDC

### **Enable/Disable Function**

Pin #1 Pin #3 HIGH(OPEN) Output		
· / /	Pin #1	Pin #3
	HIGH(OPEN)	Output
LOW High Impedance	LOW	High Impedance

### Dimension(mm)

**SMAN-221** 



<sup>\*\*</sup>Symmetry of 45~55% is available.

<sup>\*\*\*</sup>Specification subject to change without notice.