

CRYSTAL OSCILLATORS



SMAN-321 SERIES

CERAMIC PACKAGE For 32.768KHz

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

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

Actual Size:

Specification

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			

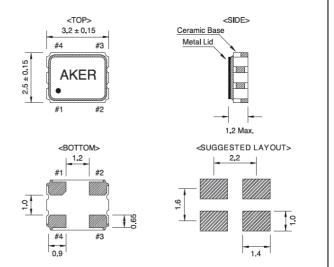
^{*}Inclusive of 25°C±3°C & Operating Temperature Range.

Pin Connection

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

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

SMAN-321



^{**}Symmetry of 45~55% is available.

^{***}Specification subject to change without notice.