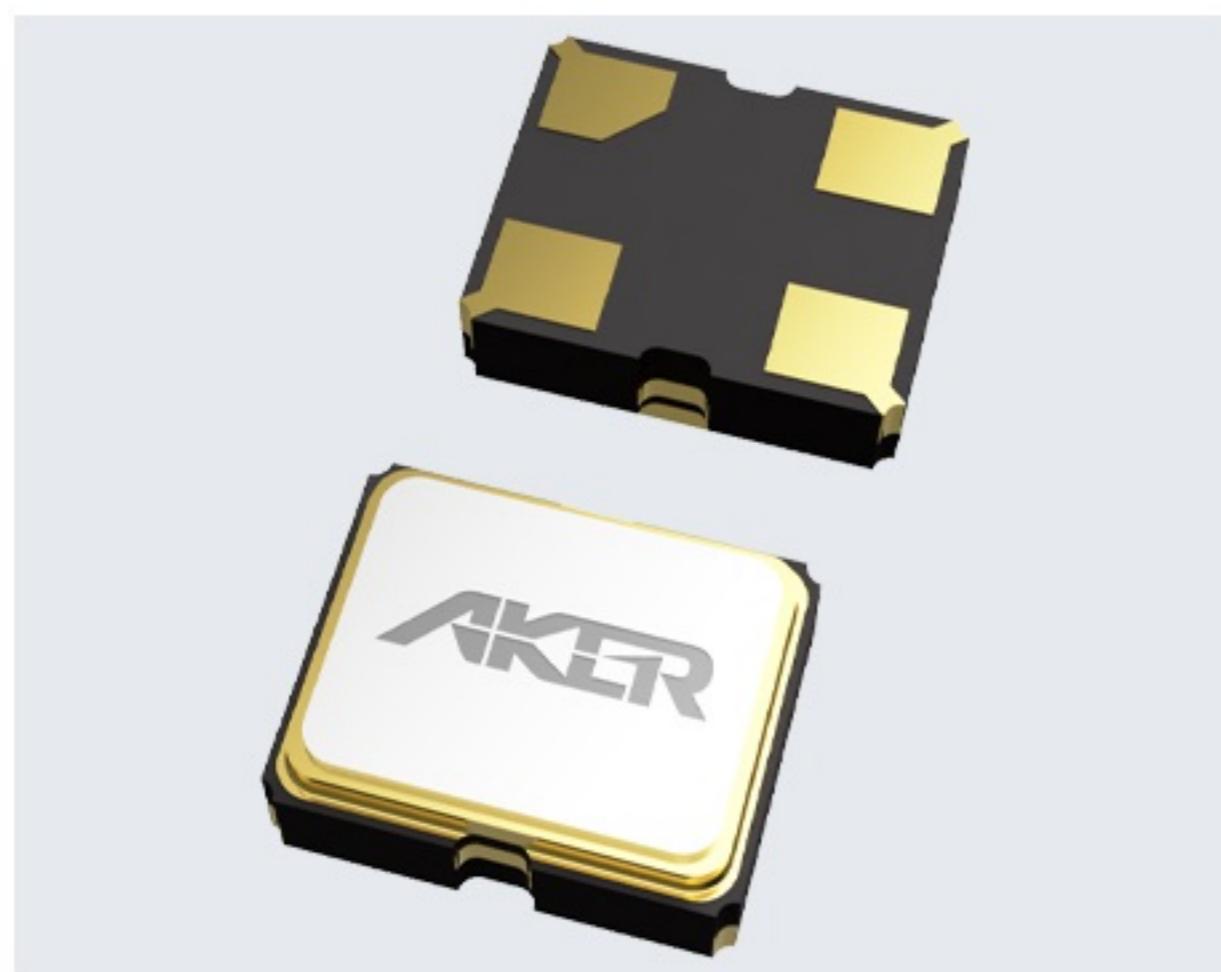


CRYSTAL OSCILLATORS

Automotive Grade

ACTUAL SIZE:

SMAF-221 SERIES CERAMIC PACKAGE For 32.768KHz



APPLICATIONS

- ▶ DVR
- ▶ Camera
- ▶ Medical
- ▶ Industry Control
- ▶ Wireless
- ▶ Communication
- ▶ Telecom
- ▶ IoT

FEATURES

- ▶ Seam Seal
- ▶ Excellent Solderability
- ▶ Tri-State
- ▶ Low Power Consumption
- ▶ RoHS Compliant
- ▶ IATF-16949 Certified
- ▶ AEC-Q200 Qualified

Specification

MODEL

FREQUENCY RANGE	Hz	32.768K			
FREQUENCY STABILITY*	ppm	$\pm 25 \sim \pm 100$			
OPERATING TEMPERATURE	°C	$-40 \sim +85$ Or $-40 \sim +125$			
STORAGE TEMPERATURE	°C	$-55 \sim +125$			
POWER SUPPLY VOLTAGE	VDC	+1.8 $\pm 10\%$	+2.5 $\pm 10\%$	+3.3 $\pm 10\%$	+1.62 ~ +3.63
OUTPUT LEVEL		CMOS			
OUTPUT SYMMETRY	%	45 ~ 55 (at 50% VDC)			
INPUT CURRENT	uA(Max.)	200			
RISE/FALL TIME	ns(Max.)	50			
OUTPUT LOAD		15 pF Max.			
AGING	ppm/Year	± 3			

*Inclusive of $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ & Operating Temperature Range.

**Specification subject to change without notice.

Pin Connection

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

Enable/Disable Function

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

Dimension(mm)

SMAF-221 SERIES

