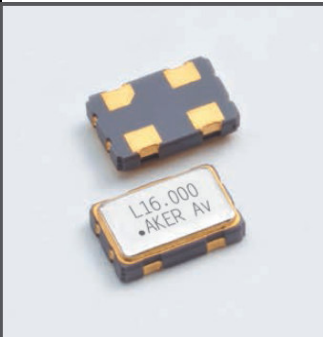


# CRYSTAL OSCILLATORS



## SMAN-531 SERIES

### CERAMIC PACKAGE

- Applications**
- Industry Control
  - IPC
  - Server
  - Media

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

Actual Size:

### Specification

#### MODEL

FREQUENCY RANGE	MHz	0.50~156.25	0.50~156.25	0.50~156.25	0.50~54.00	0.50~100.00
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	+5.0 ± 10%
OUTPUT LEVEL		CMOS				
OUTPUT SYMMETRY**	%	40 ~ 60 (at 50% VDC)				
INPUT CURRENT						
0.5 ~ 9.9MHz	mA (Max.)	5	6	7	7	10
10.0 ~ 19.9MHz		6	7	7	7	15
20.0 ~ 31.9MHz		6	8	12	12	25
32.0 ~ 49.9MHz		15	20	20	20	35
50.0 ~ 79.9MHz		15	20	25	25	50
80.0 ~ 99.9MHz		20	25	30	30	60
100.0 ~ 156.25MHz		25	30	40	40	80
RISE/FALL TIME						
0.5 ~ 31.9MHz	ns (Max.)	5	5	10	10	10
32.0 ~ 49.9MHz		5	5	10	10	6
50.0 ~ 79.9MHz		4	4	8	8	5
80.0 ~ 99.9MHz		3	3	5	5	5
100.0 ~ 156.25MHz		3	3	4	4	4
OUTPUT LOAD		15 pF ( 30 pF ) Max.				
AGING	ppm/Year	± 3				

\*Inclusive of 25°C±3°C & Operating Temperature Range.

\*\*Symmetry of 45~55% is available.

\*\*\*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)

#### SMAN-531

