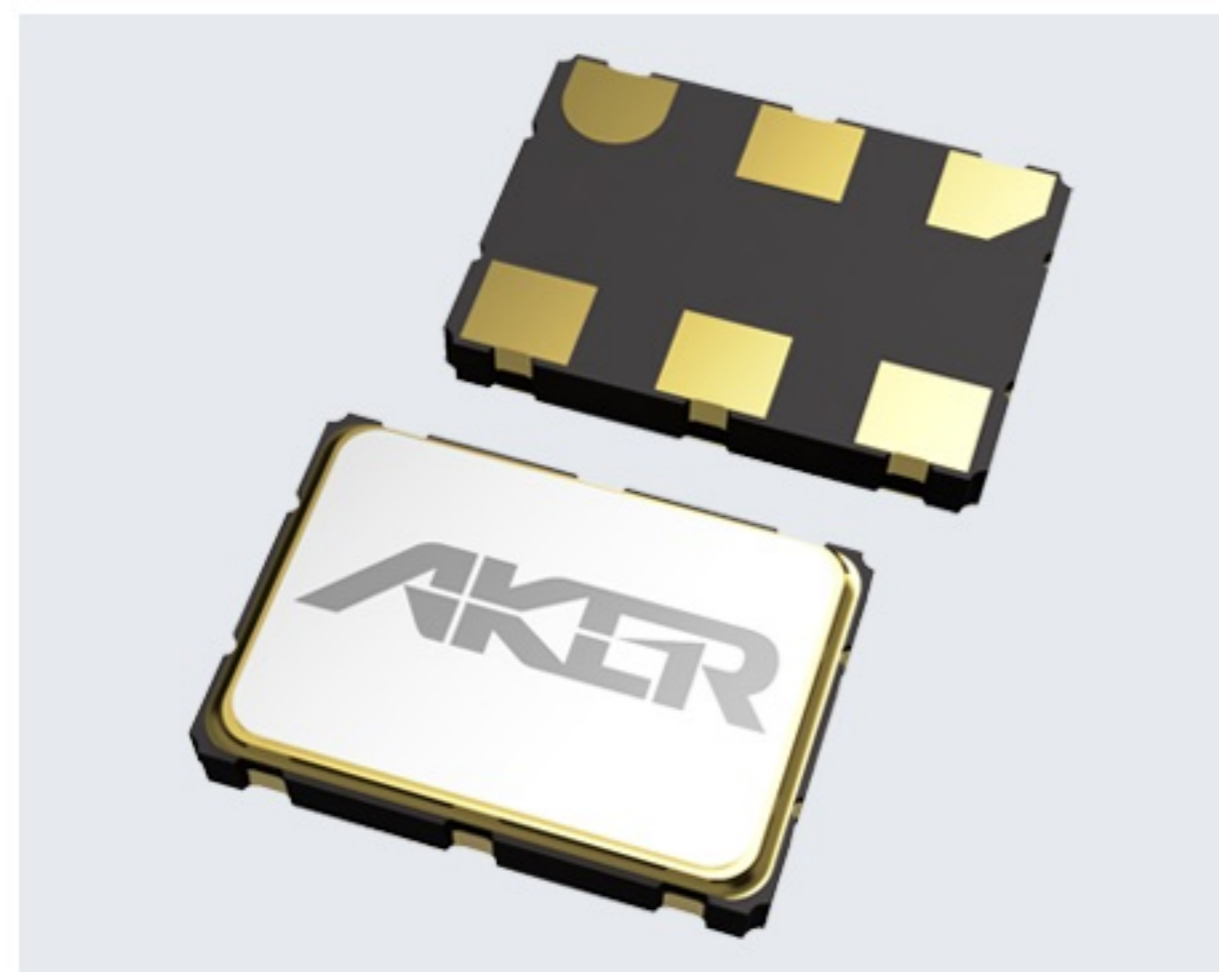


# CRYSTAL OSCILLATORS

LVPECL Automotive Grade

ACTUAL SIZE:

## SMEF-751 SERIES CERAMIC PACKAGE



### APPLICATIONS

- ▶ SONET/SDH
- ▶ Transceiver
- ▶ Optical module

### FEATURES

- ▶ LVPECL Complementary Output
- ▶ Low Phase Jitter ( 12KHz to 20MHz )  
Under 0.5 ps ( RMS )
- ▶ RoHS Compliant
- ▶ Low Profile Package Design  
( 1.4mm height max. )
- ▶ IATF-16949 Certified
- ▶ AEC-Q200 Qualified

## Specification

### MODEL

FREQUENCY RANGE	MHz	13.500 ~ 160.000	
FREQUENCY STABILITY*	ppm	± 25 ~ ± 100	
OPERATING TEMPERATURE	°C	- 20 ~ + 70 Or Specify ( - 40 ~ + 125 is available)	
STORAGE TEMPERATURE	°C	- 55 ~ + 125	
POWER SUPPLY VOLTAGE	VDC	+2.5 ± 5%	+3.3 ± 5%
OUTPUT VOLTAGE HIGH (V <sub>OH</sub> )	V (Min.)	1.475	2.275
OUTPUT VOLTAGE LOW (V <sub>OL</sub> )	V (Max.)	1.095	1.680
OUTPUT LOAD ( Connect to VDC -2V)	Ω	50	
OUTPUT SYMMETRY	%	45 ~ 55	45 ~ 55
<b>INPUT CURRENT</b>			
13.500 ~ 160.000MHz	mA (Max.)	50	50
<b>INPUT VOLTAGE</b>			
INPUT ENABLE VOLTAGE (V <sub>IH</sub> )	V (Min.)	1.75	2.31
INPUT DISABLE VOLTAGE (V <sub>IL</sub> )	V (Max.)	0.75	0.99
<b>RISE / FALL TIME (20% to 80% / 80% to 20% Output Swing)</b>			
13.500 ~ 99.999MHz	ns (Max.)	1.0	1.0
100.000 ~ 160.000MHz	ns (Max.)	0.5	0.5
PHASE JITTER RMS (Fj:12K~20MHz)	ps (Max.)	0.5	
AGING	ppm/Year	± 3	

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

\*\*Specification subject to change without notice.

## Pin Connection

PIN No.	Connection
#1	Enable/Disable
#2	N.C.
#3	GND
#4	Output Q
#5	Output QN
#6	VDC

## Enable/Disable Function

Pin #1	Pin #4 & Pin #5
HIGH (OPEN)	Output
LOW	High Impedance

## Dimension(mm)

### SMEF-751 SERIES

