

# CRYSTAL OSCILLATORS LVDS



## SMDN-751 SERIES

### CERAMIC PACKAGE

#### Applications

- SONET/SDH
- Fiber Channel
- Ethernet

#### Features

- LVDS Complementary Output
- Low Phase Jitter ( 12KHz to 20MHz ) Under 1 ps ( RMS )
- RoHS Compliant
- Low Profile Package Design ( 1.4mm height max. )

Actual Size:

### 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	+1.8 ± 5%	+2.5 ± 5%	+3.3 ± 5%
OUTPUT VOLTAGE HIGH (V <sub>OH</sub> )	V (Max.)	1.600	1.600	1.600
OUTPUT VOLTAGE LOW (V <sub>OL</sub> )	V (Min.)	0.900	0.900	0.900
OUTPUT LOAD ( Between Q and QN )	Ω	100		
DIFFERENTIAL OUTPUT VOLTAGE	mV	247(Min.)	330(Typ.)	454(Max.)
OFFSET VOLTAGE	V	1.125(Min.)	1.250(Typ.)	1.375(Max.)
OUTPUT SYMMETRY	%	45 ~ 55	45 ~ 55	45 ~ 55
INPUT CURRENT				
13.500 ~ 160.000MHz	mA (Max.)	50	50	50
INPUT VOLTAGE				
INPUT ENABLE VOLTAGE (V <sub>IH</sub> )	V (Min.)	1.26	1.75	2.31
INPUT DISABLE VOLTAGE (V <sub>IL</sub> )	V (Max.)	0.54	0.75	0.99
RISE / FALL TIME (20% to 80% / 80% to 20% Output Swing)				
13.500 ~ 99.999MHz	ns (Max.)	1.0	1.0	1.0
100.000 ~ 160.000MHz	ns (Max.)	0.5	0.5	0.5
PHASE JITTER RMS (Fj:12K~20MHz)	ps (Max.)	1		
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)

#### SMDN-751

