

Overview

The high temperature version is built up by strict final test based on stable process capability. An oscillation amplifier is featured with a damping resistor to reduce crystal drive current and suppress frequency deviation with VDD varying. ESD and latch-up test have complied with AEC-Q100 standard.

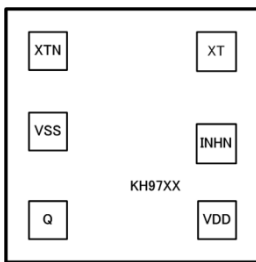
Features

Oscillation frequency (Fundamental)	4 to 60MHz
Operating Voltage	2.7 to 3.6V
Operating Temperature	-40 to 125°C
Standby Mode INHN="L"	Q Output "Hi-z"
	Oscillation Stopped
INHN Input Voltage Level	C-MOS
Q Output Duty Level	C-MOS
Q Output Current	6.4mA (VDD=2.7V)
Q Output Load (Drive Capacity)	30pF (≤60MHz)
	15pF (≤80MHz)

Device Selection Table

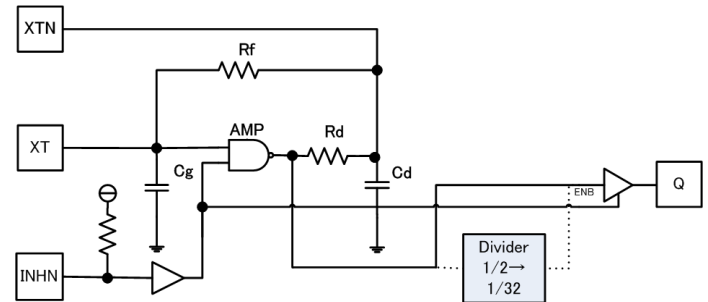
Version	Output frequency
KH9709AL1H	fo
KH9709AL2H	fo/2
KH9709AL3H	fo/4
KH9709AL4H	fo/8
KH9709AL5H	fo/16
KH9709AL6H	fo/32

PAD Locations



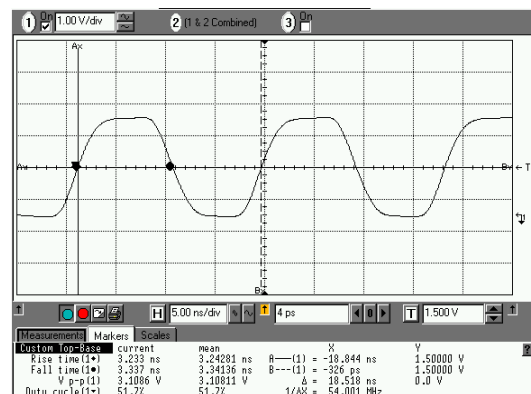
Chip Size	0.80×0.80mm
PAD Size	90×90um
Chip Thickness	200±20um
Chip Base	VSS Level

Block Diagram



Output waveform

KH9709AL1H 54MHz CL=32pF VDD=3.0V



Reliability

Test Model		Performance Values
ESD	HBM	>4000V
	MM	>400V
	FI-CDM	>1000V
Latch-up	Current Test	>200mA
	Voltage Test	>8.3V

Notes: The document is a brief data sheet of the product.

Please contact with us by email for detailed data sheet, when needed.