For high temperature, 3rd overtone oscillation　Low phase noise type　KH9705AL*y*H

Overview

The high temperature version is built up by strict final test based on stable process capability. An oscillation amplifier is featured with an optimized feedback resistor to contributes to a wide operating range with VDD(2.7 to 5.5V). ESD and latch-up test have complied with AEC-Q100 standard.

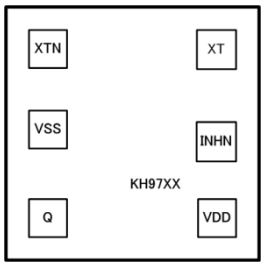
Features

Operating Voltage	2.7 to 3.6V
Operating Temperature	-40 to 125℃
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)
Output Load (Drive Capacity)	15pF (≤133MHz) 30pF (≤ 70MHz)

Device Selection Table

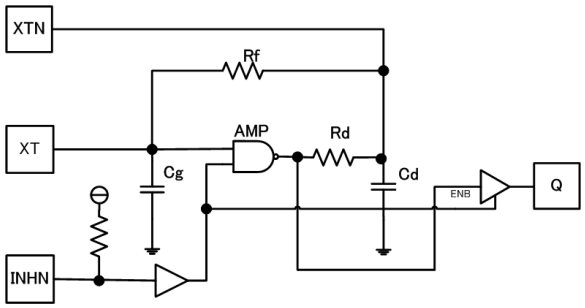
Version	Oscillation frequency (3rd Overtone)
KH9705ALAH	30 to 50MHz
KH9705ALBH	45 to 70MHz
KH9705ALCH	65 to 100MHz
KH9705ALDH	95 to 125MHz
KH9705ALEH	100 to 133MHz

PAD Locations



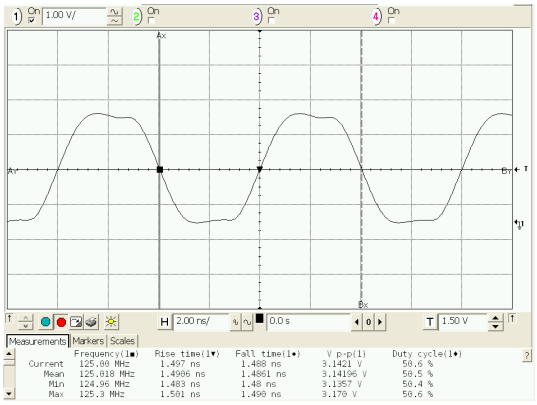
Chip Size	0.80×0.80mm
PAD Size	90×90um
Chip Thickness	200±20um
Chip Base	VSS Level

Block Diagram



Output waveform

125MHz　CL=15pF　VDD=3.0V



Reliability

Test Model		Perfomance 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.