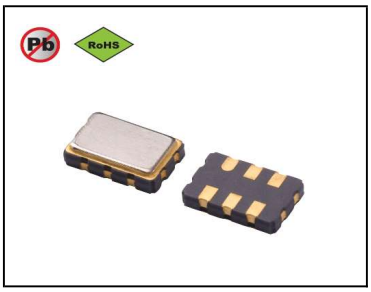
KPO5 CLOCK OSCILLATOR



■ LV-PECL SMD OSC 5.0×3.2mm

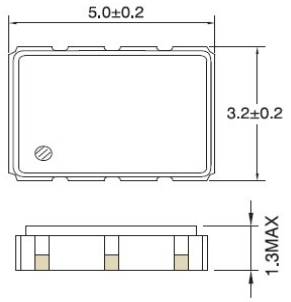
- Miniature Ceramic Surface Mount package
- Fundamental and 3rd overtone crystal design
- Wide temperature and Ultra Low phase noise

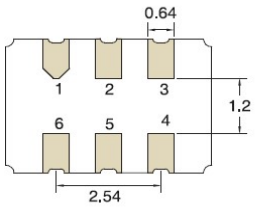
● Applications : Telecommunications, Network equipment

■ Standard Specification

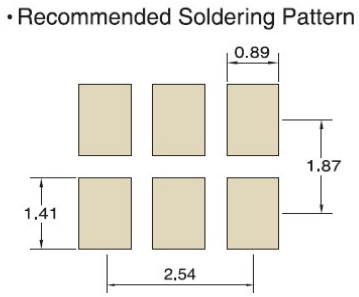
Frequency range		13.5MHz to 350MHz		
Supply voltage		2.5V	3.3V	
Current consumption		70mA Max or please specify		
Frequency Stability		±20ppm, ±25ppm, ±50ppm		±50ppm, ±100ppm
Operating Temperature Range		-20 to 70℃	-40 to 85℃	-55 to 125℃
Storage Temperature Range		-55 to 125℃		
Output load condition		50 Ω (connected to Vdd-2.0V)		
Symmertry (Duty)		50% ±10% or please specify		
Output rise and fall time (Tr /Tf)		600ps Max (Output level 20% to 80%) or please specify		
Output high level		1.415V ~ 1.760V	2.215V ~ 2.420V	
Output low level		0.670V ~ 1.195V	1.470V ~ 1.745V	
Pin 1 Function	Enable input voltage	70% Vdd Min or N.C		
	Disable input voltage	30% Vdd Max		
Oscillation start up time		5ms Max		
Aging (Initial first year)		± 3ppm Max		
Phase jitter (12KHz ~ 20MHz)		45 fs typ at 156.25MHz (3.3V)		

■ Dimensions (mm)





CONNECTION
#1 Tri-State or N.C
#2 N.C
#3 GND
#4 OUTPUT
#5 Complementary output
#6 Vdd



H&S HighTech Corp. Address : 62-7 Techno 1-ro, Yuseong-Gu, Daejeon, 34014, Republic of Korea
Email : sales@hnshightech.com | Tel : +82-42-866-1300 http://hnshightech.com:3000/product/frequency/11

■ Part Numbering Guide

KPO5 3 50 C D S1 R 125.000000

▶Package Type

▶Supply Voltage
(3) : 3.3Vdc (2) : 2.5Vdc

▶Frequency Stability
(20) : ±20ppm (25) : ±25ppm
(50) : ±50ppm (BLANK) : ±100ppm

▶Operating Temperature Range
(A) : 0/70℃ (B) : -20/70℃ (C) : -40/85℃
(D) : -40/90℃ (E) : -40/105℃ (F) : -40/125℃ (G) : -55/125℃

▶Output Frequency : xxx.xxxxxxMHZ

▶Packing Type
(B) : Bluk (R) : Tape & Reel [1,000pcs]

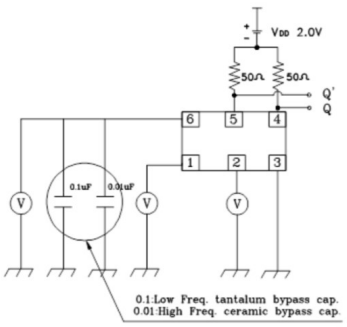
▶Enable/Disable Pin
(S1) : Pin1 E/D (S2) : Pin2 E/D
(BLANK) : No connection

▶Duty Cycle
(D) : 40/60% (T) : 45/55%

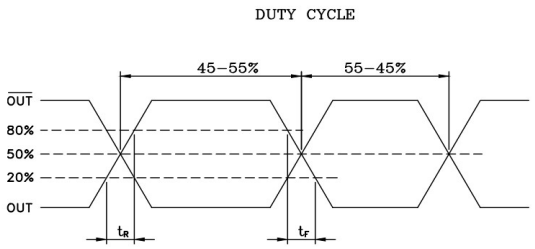
*Please contact us for other specifications.

■ Test Circuit and Waveform

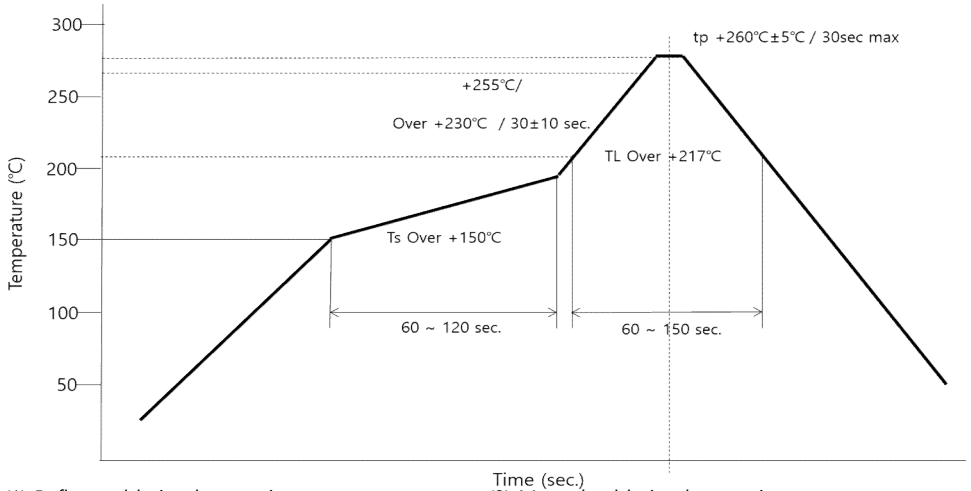
PECL Test Circuit



PECL Transition Time Waveform



■ Recommendation reflow condition



(1) Reflow soldering heat resistance
Peak Temp. : 265℃, 30sec max.
Heating : 230℃ or higher, 40sec.
Preheating : 150~180℃, 120sec.
Reflow passage times : 2 times

(2) Manual soldering heat resistance
Pressing a soldering iron of 350℃ on the terminal electrode
Soldering touch time : 4sec.
Manual soldering times : 2 times