



Features

- Any frequency between 1MHz~110MHz and 115MHz~137MHz accurate to 6 decimal places.
- CMOS output.
- Low power consumption of 3.5mA (4.9mA for High Frequency) typical at 1.8V.
- Standby mode for longer battery life
- Package size: 2.0×1.6, 2.5×2.0, 3.2×2.5, 5.0×3.2, 7.0×5.0.
- Excellent total frequency stability as low as ±20ppm.
- Fast startup time of 5ms.
- Faster delivery.



Electrical Specifications

Type	Low Power Programmable Oscillators	
Frequency Output	1MHz~110MHz	115MHz~137MHz
Frequency Stability	±20ppm, ±25ppm, ±50ppm, or specify	
Operating Temperature Range	-20~+70°C, -40~+85°C	
Supply Voltage	1.8V~3.3V	
Current Consumption	3.5mA Typ.	4.9mA Typ.
OE Disable Current	4.2mA Max.	
Standby Current	0.2mA Typ.	0.6mA Typ.
Duty Cycle	45~55%	
Rise / Fall Time	2ns Max.	
Output High Voltage	90% V _{DD}	
Output Low Voltage	10% V _{DD}	
Input High Voltage	70% V _{DD}	
Input Low Voltage	30% V _{DD}	
Startup Time	5ms Max.	
Enable / Disable Time	130ns Max.	
Resume Time	5ms Max.	
RMS Period Jitter	1.8ps Typ.	
Peak-to-Peak Period Jitter	12ps Typ.	
RMS Phase Noise (random)	0.5ps Typ.	
Storage Temperature Range	-65~+150°C	
Output Type	CMOS	

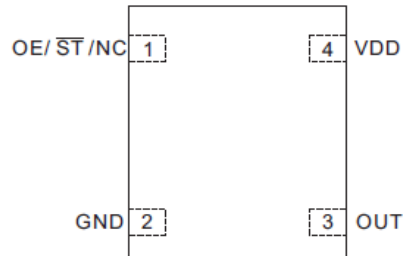
Ordering Information

KOG5032	100M000000	K	R
Product Code	Frequency Range	Function + Supply Voltage	Frequency Stability+ Operating Temperature
KOG2016/	100.000000MHz	K: OE +1.8V	R: ±20ppm -20~+70°C
KOG2520/		L: \overline{ST} +1.8V	S: ±25ppm -20~+70°C
KOG3225/		M: NC +1.8V	T: ±50ppm -20~+70°C
KOG5032/		R: OE +2.8V	X: ±20ppm -40~+85°C
KOG7050		S: \overline{ST} +2.8V	Y: ±25ppm -40~+85°C
		T: NC +2.8V	Z: ±50ppm -40~+85°C
		X: OE +3.3V	
		Y: \overline{ST} +3.3V	
		Z: NC +3.3V	



Pin Description

TOP VIEW



Pin	Symbol	Function	
1	OE/ \overline{ST} / NC	Output Enable	H: specified frequency output. L: output is high impedance. Only output device is disabled
		Standby	H: specified frequency output. L: output is low (weak pull down). Device goes to sleep mode, Supply current reduces to I_std.
		No Connect	Any voltage between 0 and V _{DD} or open: Specified frequency output. Pin 1 has on function
2	GND	Power	Electrical Ground
3	Output	Output	Oscillator Output
4	V _{DD}	Power	Power of supply voltage



Dimension

Units:mm

Package Size	Recommended Land Pattern
<p>2.0×1.6×0.75 mm</p>	
<p>2.5×2.0×0.75 mm</p>	
<p>3.2×2.5×0.75 mm</p>	
<p>5.0×3.2×0.75 mm</p>	
<p>7.0×5.0×0.90 mm</p>	