

OKI electronic components

KGL2132

2.0 GHz Two-Modulus Prescaler

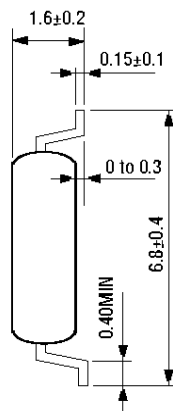
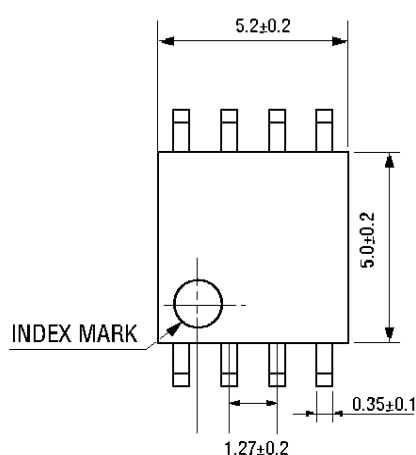
GENERAL DESCRIPTION

The KGL2132 is a two-modulus prescaler designed for PLL frequency synthesizers. The device divides the input frequency by 64 or 65, with mode selection.

FEATURES

- Toggle frequency: 2.0 GHz
- Low-power: 3.7 mA (typ.)
- Low supply voltage: 3 V
- Package: 8PSOP

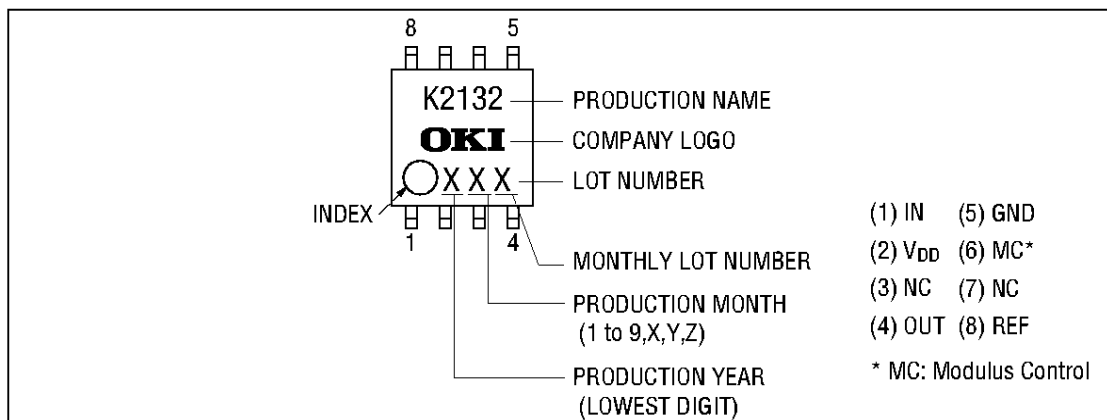
PACKAGE DIMENSIONS



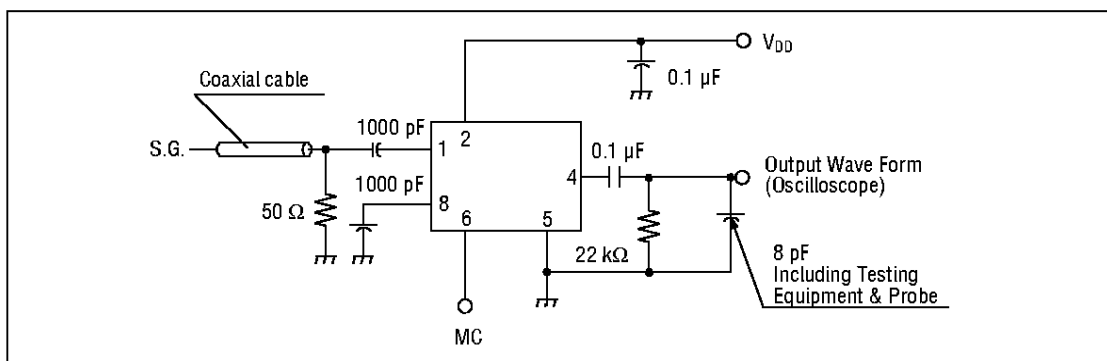
(Unit: mm)

Package material	Epoxy resin
Lead frame material	42 alloy
Pin treatment	Solder plating
Solder plate thickness	5 μ m or more

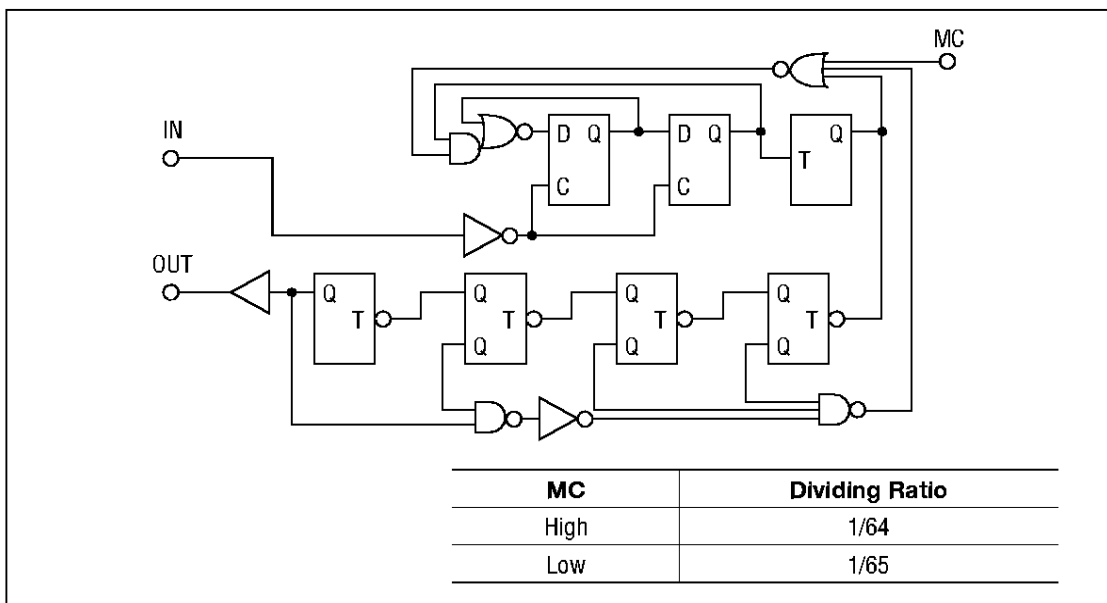
MARKING



TESTING CIRCUIT



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Unit	Min.	Max.
Power supply voltage	V_{DD}	V	-0.5	4.0
MC input voltage	—	V	-0.5	4.0
IN input power	—	dBm	—	8
Storage temperature	T_{stg}	°C	-55	125

RECOMMENDED OPERATING CONDITIONS

Item	Symbol	Unit	Min.	Max.
Power supply voltage	V_{DD}	V	2.7	3.3
Output capacitance	C_L	pF	—	8
Output resistance	R_L	k Ω	22	—
Ambient temperature	T_a	°C	-10	60

ELECTRICAL CHARACTERISTICS($V_{DD} = 3\text{ V} \pm 0.3\text{ V}$, $T_a = -10^\circ\text{C}$ to 60°C)

Item	Symbol	Unit	Min.	Typ.	Max.
Toggle frequency (Sine wave)	f_i	GHz	0.2	—	2.0
Supply current (at $T_a = 25^\circ\text{C}$)	I_{DD}	mA	—	3.7	5.0
Modulus control input, High	V_{IH}	V	2.0	—	V_{DD}
Modulus control input, Low	V_{IL}	V	0	—	0.8
Modulus control input current, High	I_{IH}	mA	—	—	0.15
Output voltage swing	V_{OUT}	Vp-p	0.5	0.8	—
Input voltage sensitivity	V_{IN}	Vp-p	0.4	—	1.0