

# OKI electronic components

## KGL2132

### 2.0 GHz Two-Modulus Prescaler

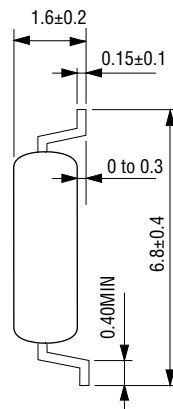
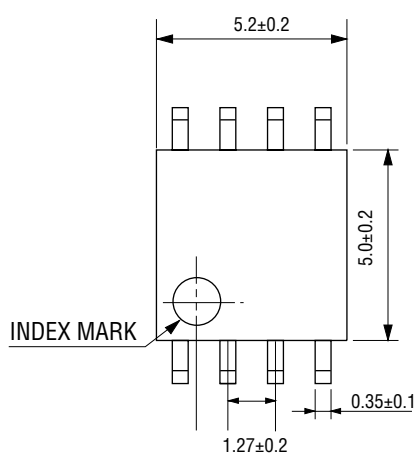
#### GENERAL DESCRIPTION

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

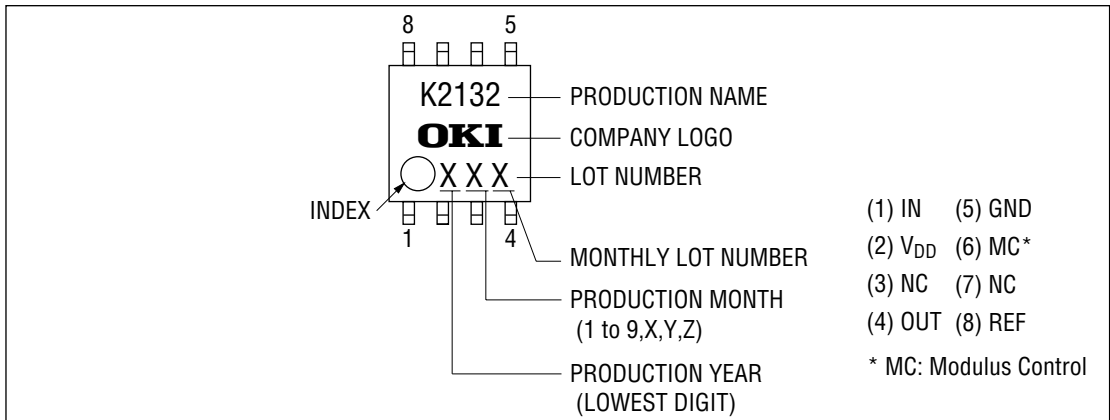
#### PACKAGE DIMENSIONS



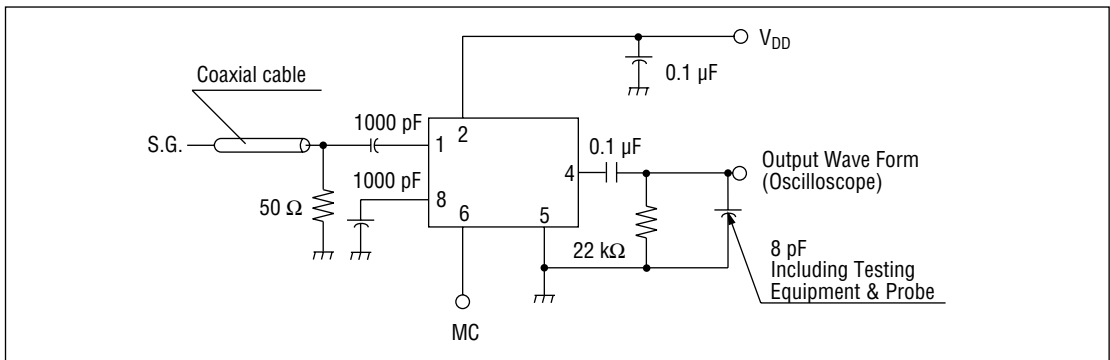
(Unit: mm)

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

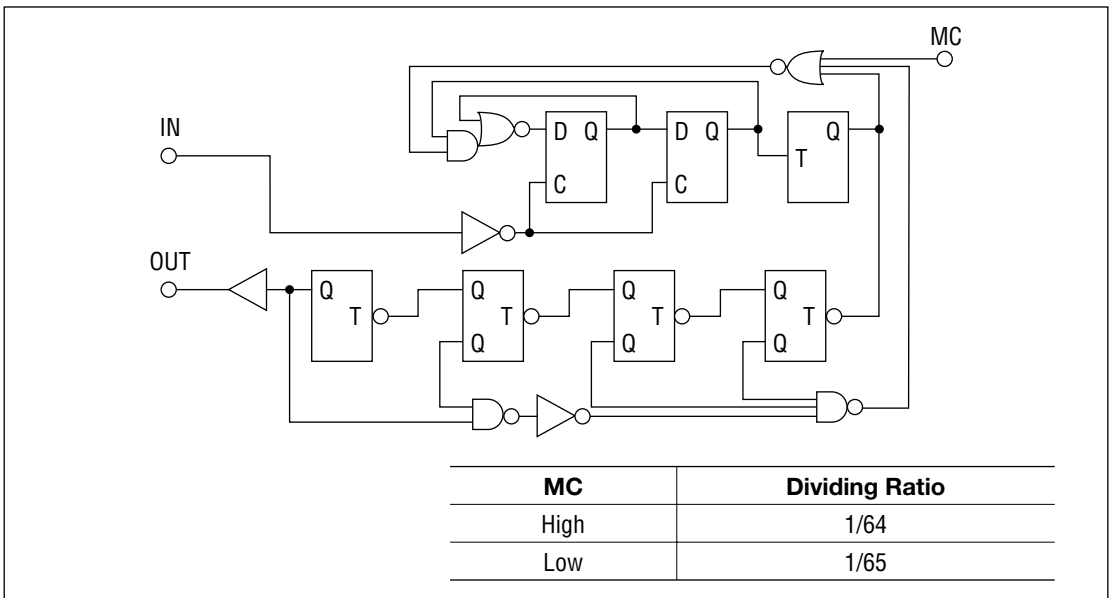
**MARKING**



**TESTING CIRCUIT**



**BLOCK DIAGRAM**



**ABSOLUTE MAXIMUM RATINGS**

Item	Symbol	Unit	Min.	Max.
Power supply voltage	V <sub>DD</sub>	V	-0.5	4.0
MC input voltage	—	V	-0.5	4.0
IN input power	—	dBm	—	8
Storage temperature	T <sub>stg</sub>	°C	-55	125

**RECOMMENDED OPERATING CONDITIONS**

Item	Symbol	Unit	Min.	Max.
Power supply voltage	V <sub>DD</sub>	V	2.7	3.3
Output capacitance	C <sub>L</sub>	pF	—	8
Output resistance	R <sub>L</sub>	kΩ	22	—
Ambient temperature	T <sub>a</sub>	°C	-10	60

**ELECTRICAL CHARACTERISTICS**(V<sub>DD</sub> = 3 V±0.3 V, T<sub>a</sub> = -10°C to 60°C)

Item	Symbol	Unit	Min.	Typ.	Max.
Toggle frequency (Sine wave)	f <sub>t</sub>	GHz	0.2	—	2.0
Supply current (at T <sub>a</sub> = 25°C)	I <sub>DD</sub>	mA	—	3.7	5.0
Modulus control input, High	V <sub>IH</sub>	V	2.0	—	V <sub>DD</sub>
Modulus control input, Low	V <sub>IL</sub>	V	0	—	0.8
Modulus control input current, High	I <sub>IH</sub>	mA	—	—	0.15
Output voltage swing	V <sub>OUT</sub>	V <sub>p-p</sub>	0.5	0.8	—
Input voltage sensitivity	V <sub>IN</sub>	V <sub>p-p</sub>	0.4	—	1.0