



Corp. Automotive Components Gr.

THE NEW VALUE FRONTIER



A KYOCERA GROUP COMPANY

## PRQC Series

11st Dec. 2015

KYOCERA Corporation  
Automotive Components  
Engineering division  
Engineering section

京セラ株式会社

## 1. Series Name

PRQC series  
 (+85deg.C / consumer/industrial / 3.2 x 1.3 mm)

## 2. Electrical Characteristics

(key parameters)

PN	Freq	Freq Initial Tolerance	Freq Temp Stability	Resonant Impedance	
	(MHz)	(%)	(%)	ohm	
PRQC8.00CR5010X000	8.00	±0.5	±0.5	60	
PRQC10.00CR5010X000	10.00	±0.5	±0.5	60	
PRQC12.00CR5010X000	12.00	±0.5	±0.5	60	
PRQC16.00CR5010X000	16.00	±0.5	±0.5	60	
PRQC20.00CR5010X000	20.00	±0.5	±0.5	60	
PRQC8.00CR1010V00L	8.00	±0.1	±0.02	500	
PRQC12.00CR1010V00L	12.00	±0.1	±0.02	200	※
PRQC16.00CR1010V00L	16.00	±0.1	±0.02	100	※
PRQC20.00CR1010V00L	20.00	±0.1	±0.02	100	※

※ +70deg.C

**(other common parameters)**

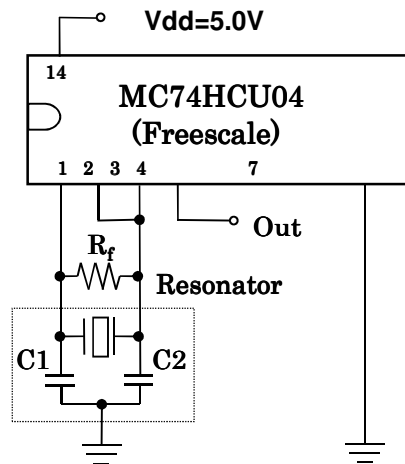
Items	Specifications
Standard Test IC	MC74HCU04 (Freescale)
Withstanding Voltage	100 V D.C. 10 sec max.
Max. Input Signal Voltage	15 Vp-p
Insulation Resistance	100 M $\Omega$ min. (at 10 V D.C.)
Operating Temperature Range	-40 to +85°C
Storage Temperature Range	-40 to +85°C
Aging for 10 years on Oscillating Frequency	fosc $\pm$ 0.1 % max. (at 25°C from initial value)

### 3-1. Measurement Condition

The reference temperature shall be  $25 \pm 2$  °C.  
 The measurement shall be performed in the temperature range from 15 to 35°C unless otherwise the result is doubtful.

### 3-2. Measurement Circuit

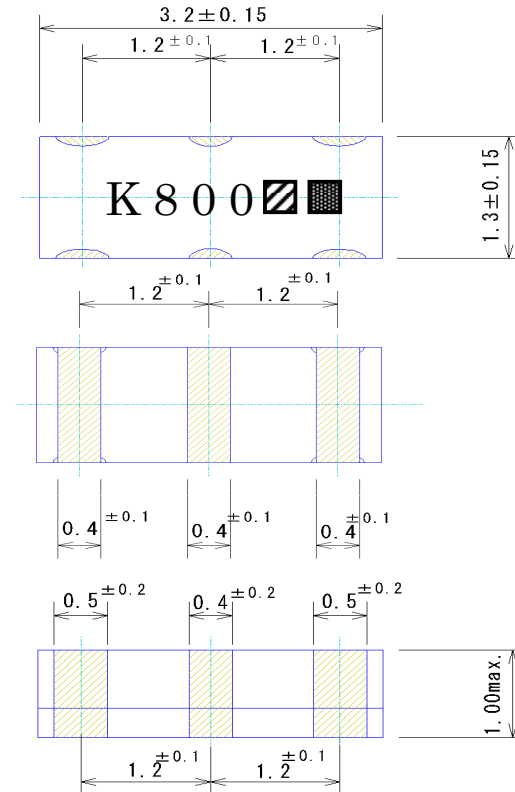
Oscillating frequency shall be measured using the Kyocera standard test circuit shown in Fig. 1.



$R_f = 1M\Omega$   
 $C_1 = C_2 = 10$  pF (Reference)

Fig.1 Standard Measuring Circuits

### 4. Dimensions



Unit: mm

Terminal: Ni/Sn plating

#### Oscillating Frequency

e.g.:800 show the oscillating frequency of 8.00 MHz.

#### ■ Date Code

2013	Jan. ~ Dec.	A~M (except "I")
2014	Jan. ~ Dec.	N~Z (except "O")
2015	Jan. ~ Dec.	a~m (except "i")
2016	Jan. ~ Dec.	n~z (except "o")

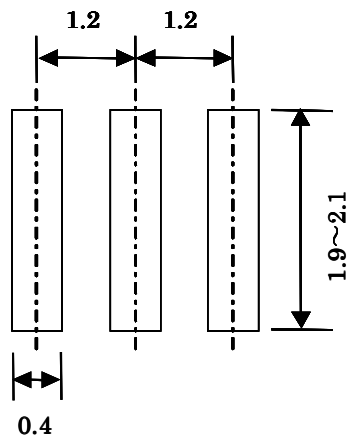
Note: The alphabet should be repeated after Jan.2017.

#### ▨ Day Code

Day	1	2	3	4	5	6	7	8	9	10	
Code	A	B	C	D	E	F	G	H	J	K	
Day	11	12	13	14	15	16	17	18	19	20	
Code	L	M	N	P	Q	R	S	T	U	V	
Day	21	22	23	24	25	26	27	28	29	30	31
Code	W	X	Y	Z	a	b	c	d	e	f	g

### 5. Recommended Land Pattern

Unit: mm



### 6. Recommended IR Reflow Profile

