



Corp. Automotive Components Gr.

THE NEW VALUE FRONTIER



A KYOCERA GROUP COMPANY

PBRV-MR Series

11st Dec. 2015

KYOCERA Corporation
Automotive Components
Engineering division
Engineering section

京セラ株式会社

1. Series Name

PBRV-MR tight tolerance series
(+125deg.C / automotive/industrial / 4.5 x 2.0 mm)

2. Electrical Characteristics (key parameters)

PN	Freq	Freq Initial Tolerance	Freq Temp Stability	Resonant Impedance
	(MHz)	(%)	(%)	ohm
PBRV4.00MR50Y000	2.00	±0.5	±0.3	60
PBRV4.19MR50Y000	4.19	±0.5	±0.3	60
PBRV4.91MR50Y000	4.91	±0.5	±0.3	60
PBRV5.00MR50Y000	5.00	±0.5	±0.3	60
PBRV6.00MR50Y000	6.00	±0.5	±0.3	60
PBRV7.37MR50Y000	7.37	±0.5	±0.3	60
PBRV7.68MR50Y000	7.68	±0.5	±0.3	60
PBRV8.00MR50Y000	8.00	±0.5	±0.3	60
PBRV4.00MR10Y000	4.00	±0.1	±0.3	60
PBRV8.00MR10Y000	8.00	±0.1	±0.3	60

PN	Freq	Freq Initial Tolerance	Freq Temp Stability	Resonant Impedance
	(MHz)	(%)	(%)	ohm
PBRV16.00MR10Y00L	16.00	±0.1	±0.1	70
PBRV20.00MR10Y00L	20.00	±0.1	±0.1	70

(other common parameters)

Items	Specifications
Standard Test IC	MC14069UB(4.0-8.0MHz) / MC74HCU04(8.01-20.0mHz) (Freescale)
Withstanding Voltage	100 V D.C. 10 sec max.
Max. Input Signal Voltage	15 Vp-p
Insulation Resistance	100 M Ω min. (at 10 V D.C.)
Operating Temperature Range	-40 to +125°C
Storage Temperature Range	-40 to +125°C
Aging for 10 years on Oscillating Frequency	$f_{osc} \pm 0.05 \sim \pm 0.30$ % max. (at 25°C from initial value)

3-1. Measurement Condition

The reference temperature shall be 25 ± 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.

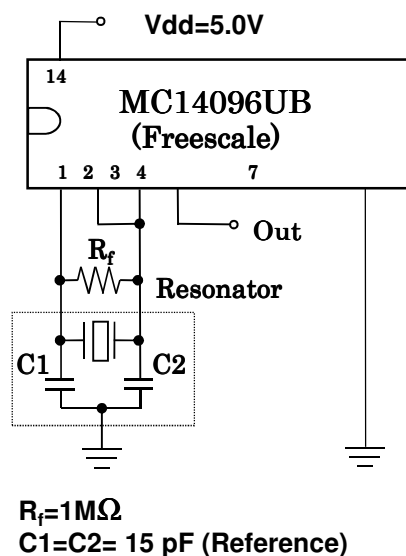
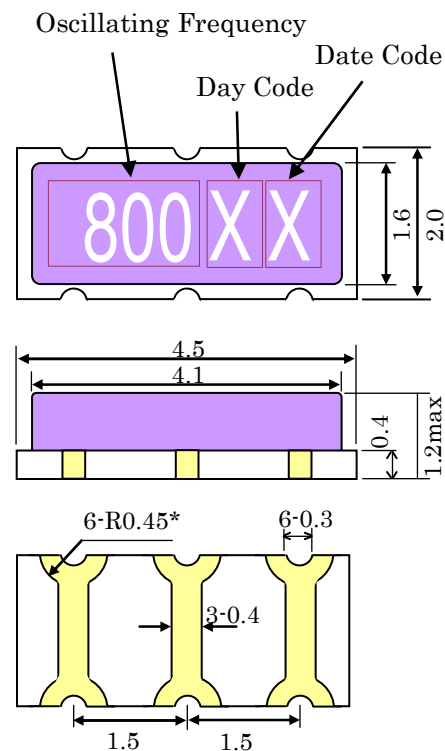


Fig.1 Standard Measuring Circuits

4. Dimensions



Unit: mm
Tol.: ± 0.2 mm (* ± 0.1 mm)
Terminal: Au flashed nickel barrier

Oscillating Frequency

Ex.8.00 (8.00 is the meaning of 8.00MHz/Oscillating Frequency)

Date Code

Jan. to Dec. 2013: A to M (except "I")

Jan. to Dec. 2014: N to Z (except "O")

Jan. to Dec. 2015: a to m (except "i")

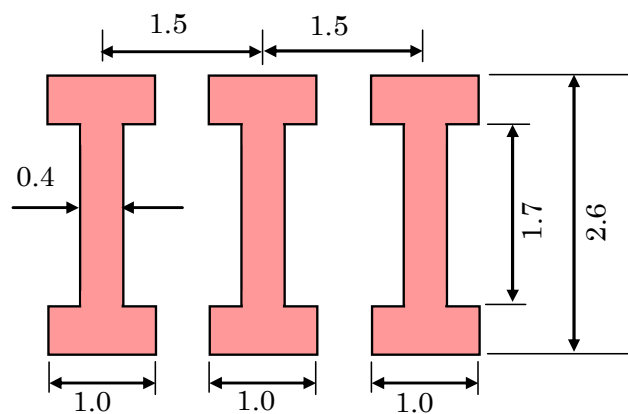
Jan. to Dec. 2016: n to z (except "o")

Note:

These alphabets should be after Jan.2017.

5. Recommended Land Pattern

Unit: mm



6. Recommended IR Reflow Profile

