



Features

- High reliability, high temperature withstanding ceramic case
- Rectangular shape allows easy pick and placement
- Small & low profile
- Reflow solderable
- Excellent Solderability(Nickel barrier+Au flush termination)

How to Order

PBRC 4.00 G R □ □
① ② ③ ④ ⑤

- ① Series
- ② Oscillating frequency (MHz)
- ③ A, G, L : without capacitors type

A	2.00 to 3.57MHz	G	3.58 to 20.0MHz
L	4.00 to 20.0MHz		

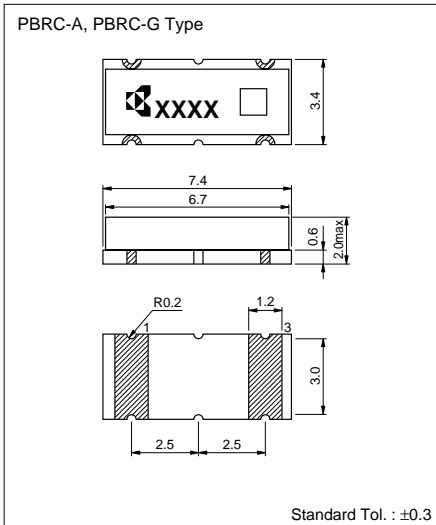
- ④ Packaging : PBRC-A, PBRC-G: 2000pcs/reel
PBRC-L : 3000pcs/reel

- ⑤ Tolerance

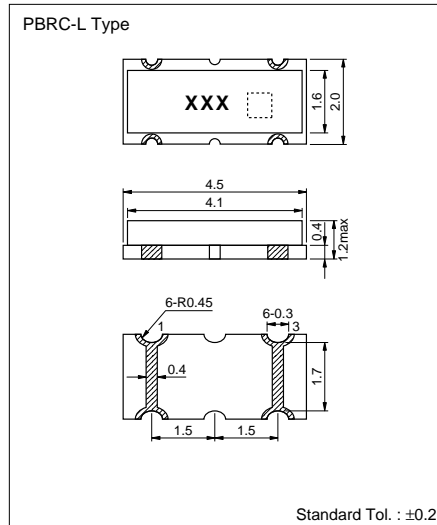
Initial	2.00 to 8.00MHz	8.01 to 20.00MHz
NIL	±0.5%	±0.7%
03	±0.3%	—
05	—	±0.5%

Dimensions

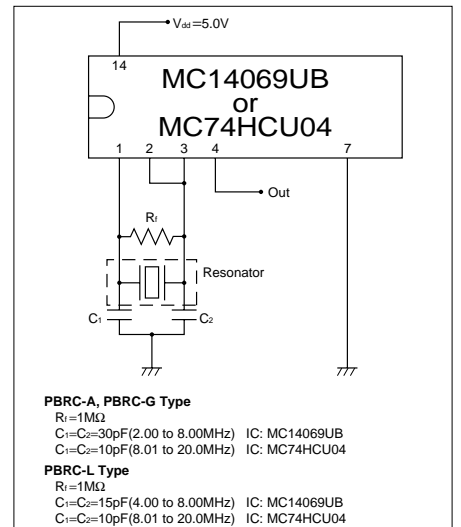
(Unit : mm)



(Unit : mm)



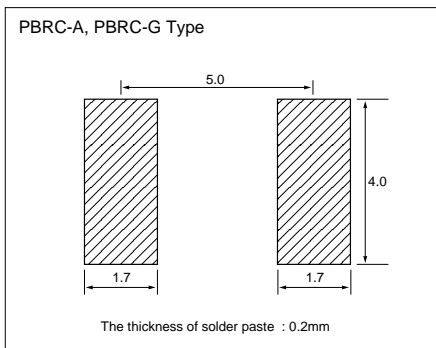
Test Circuit



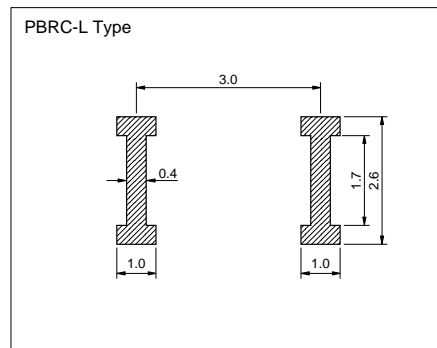
Remark:
 C1 and C2 are referenced capacitance values to measure each parameter under.
 The right test circuit(IC: MC14069UD).
 C1 and C2 values would be modified depend upon various IC to be used.

Recommended Land Pattern

(Unit : mm)



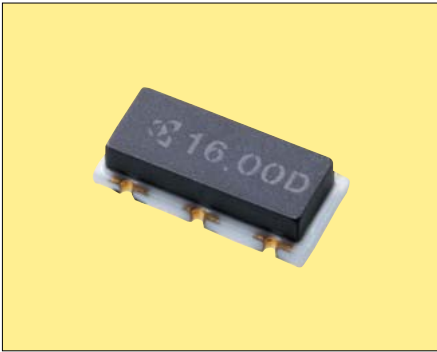
(Unit : mm)



Specifications

Series	Frequency Range(MHz)	Frequency Tolerance(25°C)	Temperature Stability
PBRC-A	2.00 to 3.57	±0.5%	±0.5% (-20 to 80°C)
	3.58 to 8.00	(op. ±0.3%)	±0.5% (-40 to 85°C)
PBRC-G	8.01 to 20.0	±0.7% (op. ±0.5%)	±0.1% (-40 to 85°C)
	3.68 to 8.00	±0.5% (op. ±0.3%)	±0.5% (-40 to 85°C)
PBRC-L	8.01 to 20.0	±0.7% (op. ±0.5%)	±0.1% (-40 to 85°C)
	3.68 to 8.00	±0.5% (op. ±0.3%)	±0.5% (-40 to 85°C)

Please contact our local sales office if you need over 8MHz.



Features

- High reliability, high temperature withstanding ceramic case
- Rectangular shape allows easy pick and placement
- Small & low profile
- Reflow solderable
- Excellent Solderability(Nickel barrier+Au flush termination)

How to Order

PBRC 4.00 H R □ □
① ② ③ ④ ⑤

- ① Series
- ② Oscillating frequency (MHz)
- ③ B, H, M : Built-in capacitor type

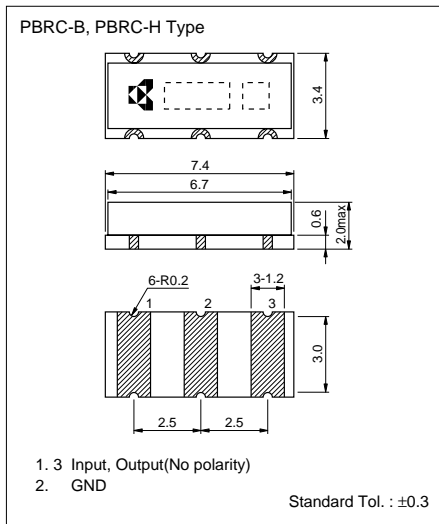
B	2.00 to 3.57MHz
H	3.58 to 20.00MHz
M	3.68 to 20.00MHz

- ④ Packaging : PBRC-B, PBRC-H: 2000pcs/reel
PBRC-M : 3000pcs/reel
- ⑤ Tolerance

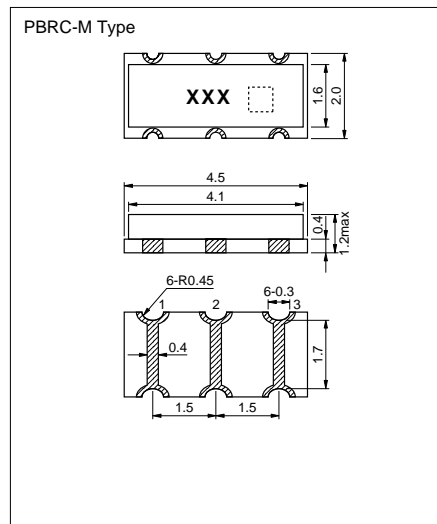
	2.00 to 8.00MHz	8.01 to 20.00MHz
NIL	±0.5%	±0.7%
03	±0.3%	—
05	—	±0.5%

Dimensions

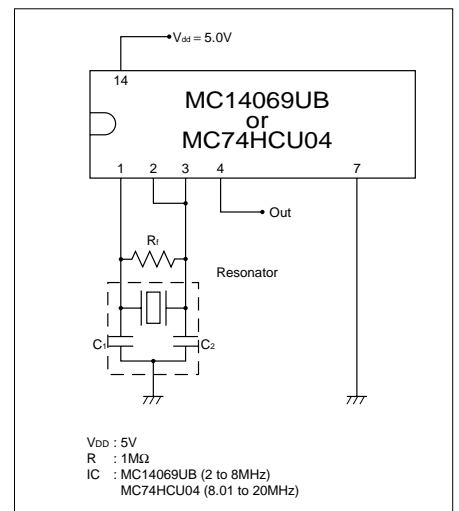
(Unit : mm)



#	Pin #
1	Input
2	Ground
3	Output



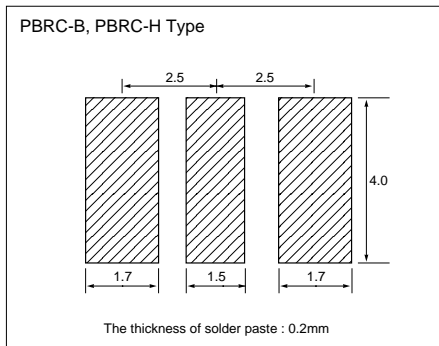
Test Circuit



Notice
Please refer to IC Application Guide on our WEB site for IC matching.

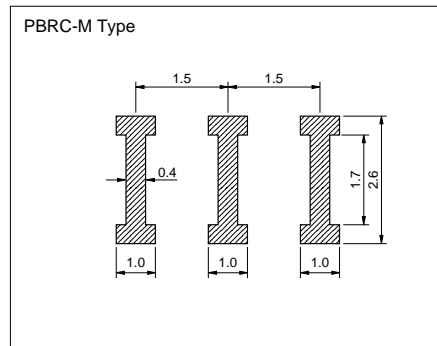
Recommended Land pattern

(Unit : mm)



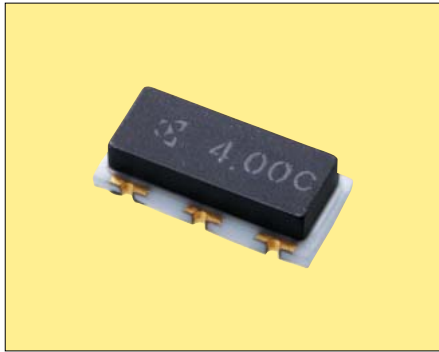
Recommended Land pattern

(Unit : mm)



Specifications

Series	Frequency Range(MHz)	Frequency Tolerance(25°C)	Temperature Stability
PBRC-B	2.00 to 3.57	±0.5%	±0.5% (-20 to 80°C)
	3.58 to 8.00	(op. ±0.3%)	±0.5% (-40 to 85°C)
PBRC-H	8.01 to 20.0	±0.7% (op. ±0.5%)	±0.1% (-40 to 85°C)
PBRC-M	3.68 to 8.00	±0.5% (op. ±0.3%)	±0.5% (-40 to 85°C)
	8.01 to 20.00	±0.7% (op. ±0.5%)	±0.1% (-40 to 85°C)



Features

- Miniature & low profile
- Rectangular shape allows easy pick and placement
- Component cost and space saving
- High density mounting possible
- Reflow solderable & washable
- High reliability, high temperature operating with ceramic case

Applications

- Automotive
- ABS
 - ECU
 - Air-Bag System

How to Order

PBRV 4.00 H R - □□
① ② ③ ④ ⑤

- ① Series
- ② Oscillating frequency (MHz)
- ③ Built-in Capacitor type

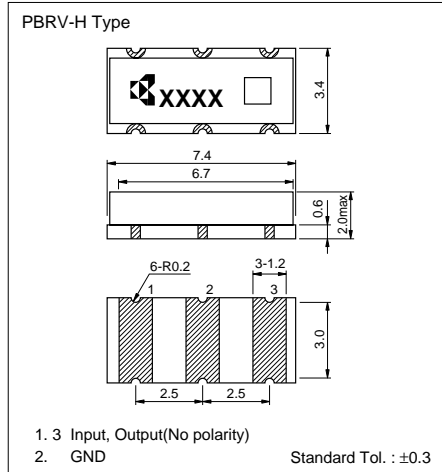
H 4.00 to 20.0MHz **M** 4.00 to 20.0MHz

- ④ Packaging : PBRV-H: 2000pcs/reel
PBRV-M: 3000pcs/reel

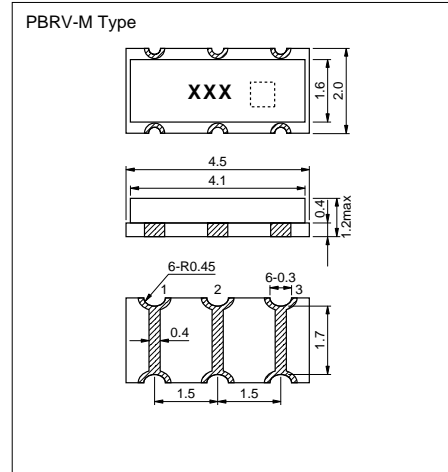
- ⑤ Operating Temp. Range
Y: -40 to +125°C
Z: -40 to +150°C

Dimensions

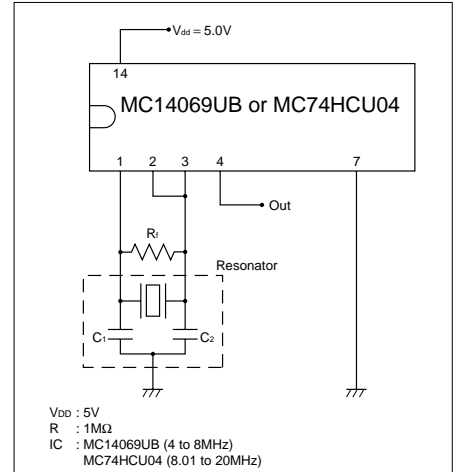
(Unit : mm)



#	Pin #
1	Input
2	Ground
3	Output



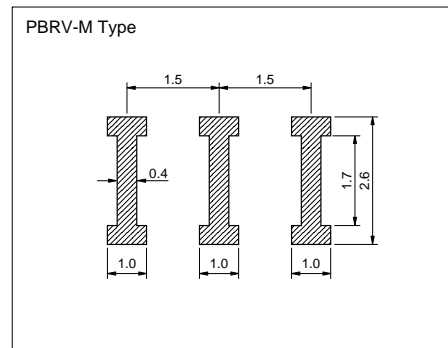
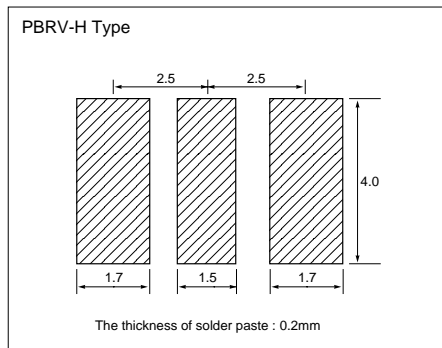
Test Circuit



Notice
Please refer to IC Application Guide on our WEB site for IC matching.

Recommended Land pattern

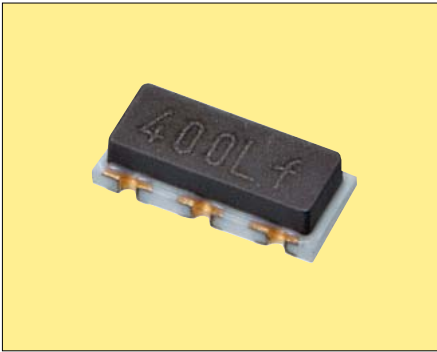
(Unit : mm)



Specifications

Series	Frequency Range(MHz)	Frequency Tolerance(25°C)	Temperature Stability
PBRV-H	4.00 to 8.00	±0.5% (op. ±0.3%)	Y: ±0.5%(-40 to +125°C) Z: ±0.5%(-40 to +150°C)
PBRV-M	8.01 to 20.00	±0.7% (op. ±0.5%)	Y: ±0.1%(-40 to +125°C) Z: ±0.2%(-40 to +150°C)

Please contact our local sales office if you need without capacitor type and tight frequency tolerance type for CANBUS Application.



Features

- Improved frequency tolerance for CANBUS Application of Automotive

How to Order

PBRV 8.00 H R 01 C □ Y
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- Series
- Oscillating frequency (MHz)
- Type(H: with capacitor)
- Packaging
- Initial Frequency Tolerance $\pm 0.1\%$
- Application(C: CANBUS)
- Unique code
- Operating Temp. Range

NIL	-40 to +85°C
Y	-40 to +125°C

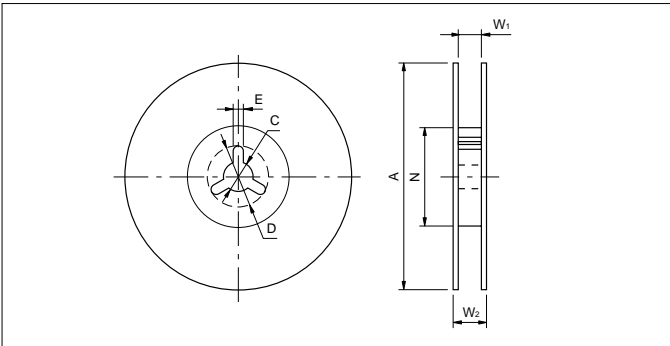
Specifications

Series	PBRV-HR	PBRV-HR	PBRC-HR	PBRC-HR
Part Number	PBRV-HR01C□Y	PBRV-HR01C□Y	PBRC-HR01C□	PBRC-HR01C□
Operating Temperature Range	-40 to +125°C	-40 to +125°C	-40 to +85°C	-40 to +85°C
Frequency Range	4.0 to 7.9MHz	8.0 to 20.0MHz	4.0 to 7.9MHz	8.0 to 20.0MHz
Initial+Temperature	$\pm 0.3\%$	$\pm 0.2\%$	$\pm 0.3\%$	$\pm 0.2\%$
Aging	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$
Total Frequency Tolerance	$\pm 0.4\%$	$\pm 0.3\%$	$\pm 0.4\%$	$\pm 0.3\%$

Dimensions: See each page for each series.
Aging: 10 years at 25°C

Packaging

Reel

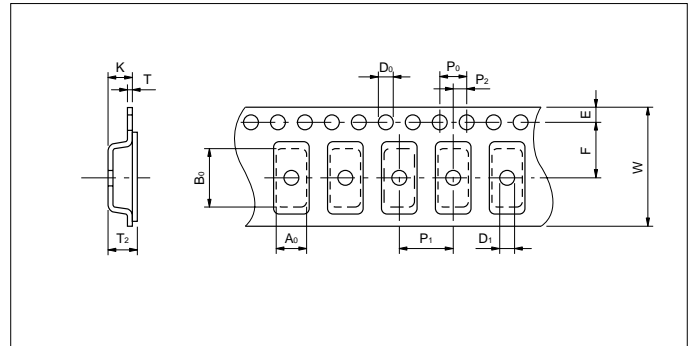


2,000pcs/Reel

Code	A	N	W ₁	W ₂
	250 ± 2.0	80 ± 2.0	16.5 $^{+1.1}_{-0.0}$	23.6max
	180 $^{+3}_{-3}$	60 $^{+1}_{-1}$	13.0 ± 0.3	15.4 ± 1
Code	C	D	E	
	13.0 ± 0.5	21.0 ± 0.8	2.0 ± 0.5	
	13.0 ± 0.2	21.0 ± 0.8	2.0 ± 0.5	

Upper line shows external dimensions 7.4x3.4x2.0mm
Lower line shows external dimensions 4.5x2.0x1.2mm
7.4x3.4x2.0mm=PBRC-A, PBRC-G, PBRC-B, PBRC-H, PBRV-A, PBRV-G, PBRV-B, PBRV-H
4.5x2.0x1.2mm=PBRC-L, PBRC-M, PBRV-L, PBRV-M

Taping



Code	A ₀	B ₀	W	F	E	P ₁
	3.80 ± 0.1	7.80 ± 0.1	16.00 ± 0.3	7.50 ± 0.1	1.75 ± 0.1	8.00 ± 0.1
	2.20 ± 0.1	4.70 ± 0.1	12.00 ± 0.2	5.5 ± 0.05	1.75 ± 0.1	4.00 ± 0.1
Code	P ₀	D ₀	T	T ₂	K*	
	4.00 ± 0.1	1.50 $^{+0.1}_{-0.1}$	0.30 ± 0.05	2.45 ± 0.2	2.40 ± 0.2	
	4.00 ± 0.1	1.50 $^{+0.1}_{-0.1}$	0.30 ± 0.05	1.85max	1.80max	

Upper line shows external dimensions 7.4x3.4x2.0mm
Lower line shows external dimensions 4.5x2.0x1.2mm
7.4x3.4x2.0mm=PBRC-A, PBRC-G, PBRC-B, PBRC-H, PBRV-A, PBRV-G, PBRV-B, PBRV-H
4.5x2.0x1.2mm=PBRC-L, PBRC-M, PBRV-L, PBRV-M