

RoHS Compliant

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 flash terminations)

How to Order (PBRC-H,PBRC-M)

PBRC 15.00 H R 50 Y 000
① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Frequency (MHz)
- ③ Type (H,M)
- ④ Packing _ Bulk (Null) R Reel (H: 2k/reel, M: 3k/reel)
- ⑤ Frequency Tolerance at 25°C

| | | | |
|-----------|-------|-----------|-------|
| 10 | ±0.1% | 20 | ±0.2% |
| 30 | ±0.3% | 40 | ±0.4% |
| 50 | ±0.5% | 70 | ±0.7% |

- ⑥ Operating Temperature

| | | | |
|----------|----------------|----------|----------------|
| X | -40°C to 85°C | Y | -40°C to 125°C |
| Z | -40°C to 150°C | | |

- ⑦ Unique Code

How to Order (PRQC)

PRQC 8.00 S R 50 10 X 000
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Series
- ② Frequency (MHz)
- ③ Type (S)
- ④ Packing _ Bulk (Null) R Reel (3k/reel)
- ⑤ Frequency Tolerance at 25°C

| | | | |
|-----------|-------|-----------|-------|
| 10 | ±0.1% | 20 | ±0.2% |
| 30 | ±0.3% | 40 | ±0.4% |
| 50 | ±0.5% | 70 | ±0.7% |

- ⑥ Built-in Capacitance 10pF : 10

- ⑦ Operating Temperature

| | | | |
|----------|---------------|----------|----------------|
| W | -20°C to 80°C | Y | -40°C to 125°C |
| X | -40°C to 85°C | Z | -40°C to 150°C |

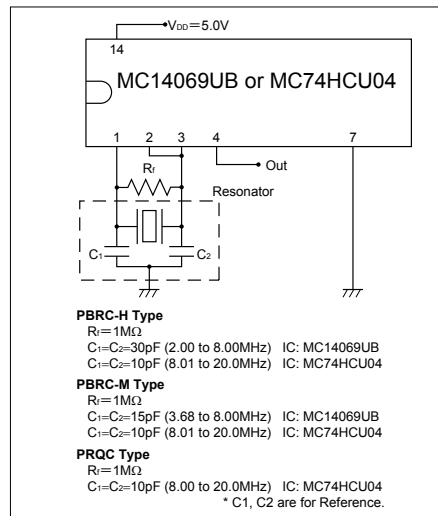
- ⑧ Unique Code

Specifications

| Series | Frequency Range(MHz) | Frequency Tolerance(25°C) | Temperature Stability |
|--------|----------------------|---------------------------|-----------------------|
| PBRC-H | 2.00 to 8.00 | ±0.5% (op. ±0.3%) | ±0.5% (-40 to 85°C) |
| | 8.01 to 20.0 | ±0.7% (op. ±0.5%) | ±0.1% (-40 to 85°C) |
| PBRC-M | 4.00 to 8.00 | ±0.5% (op. ±0.3%) | ±0.5% (-40 to 85°C) |
| | 8.01 to 20.0 | ±0.7% (op. ±0.5%) | ±0.1% (-40 to 85°C) |
| PRQC | 8.00 to 20.0 | ±0.5% (op. ±0.3%) | ±0.5% (-40 to 85°C) |

* Aging for 10 years is within ±0.3% from the initial frequency at 25°C.

Test Circuit

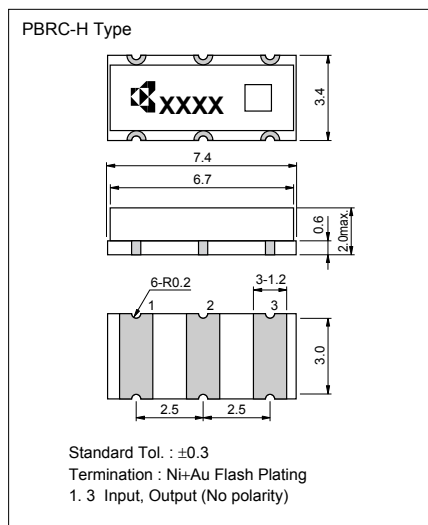


Note)

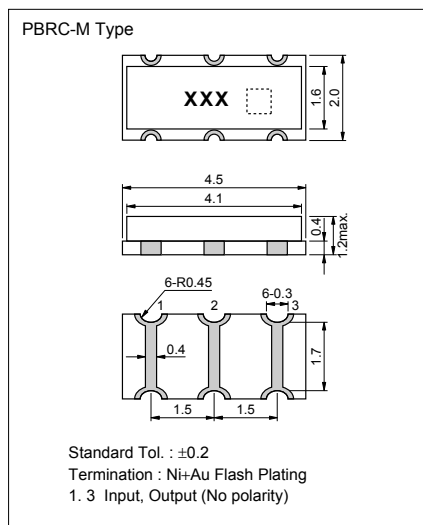
- This product includes built-in capacitors, but values may not be the most appropriate depending on IC's.
- Evaluation of circuit with IC is necessary. IC circuit matching may be referenced with
 - 1) IC data books
 - 2) List of Recommended circuits in Kyocera website.
- Please contact IC manufacturer or Kyocera when there are difficulties in finding recommended circuits.

Dimensions

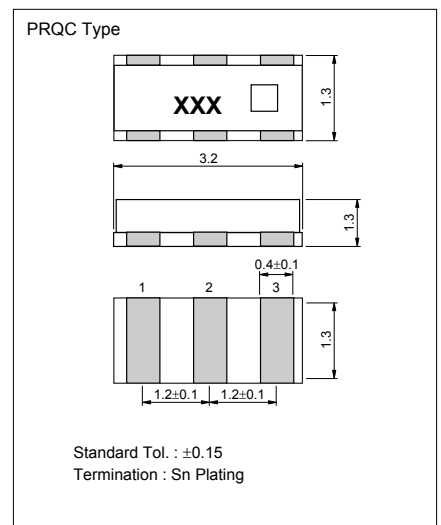
(Unit : mm)



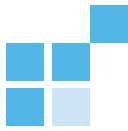
(Unit : mm)



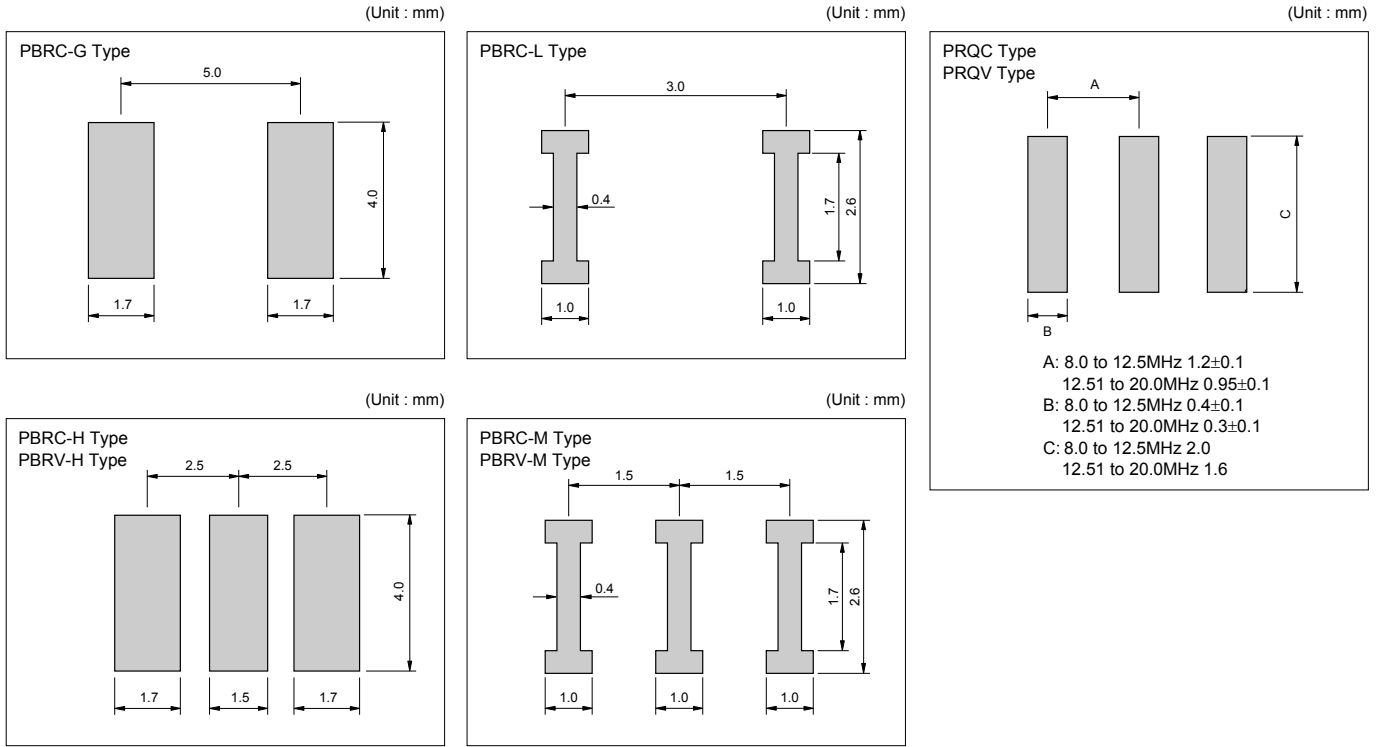
(Unit : mm)



| # | Pin # |
|----------|--------|
| 1 | Input |
| 2 | Ground |
| 3 | Output |

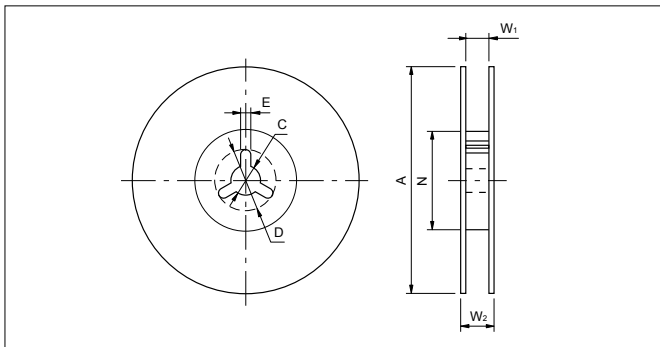


Recommended Land Pattern

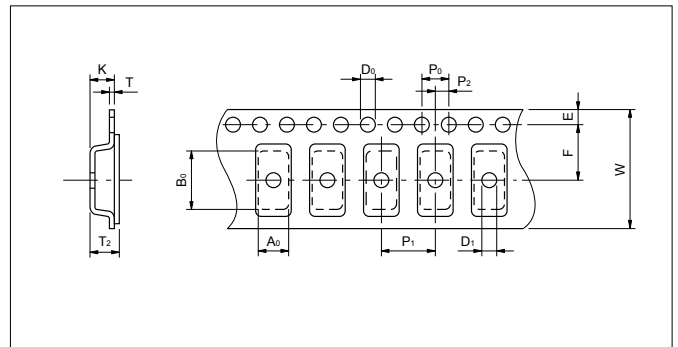


Packaging

Reel



Taping



| Code | A | N | W ₁ | W ₂ | C | D | E |
|---------------|---------------------------------|--------------------------------|--------------------------------------|----------------|----------|----------|---------|
| 7.4×3.4×2.0mm | 250±2.0 | 80±2.0 | 16.5 ^{+0.1} _{-0.0} | 23.6max. | 13.0±0.5 | 21.0±0.8 | 2.0±0.5 |
| 4.5×2.0×1.2mm | 180 ⁺⁰ ₋₃ | 60 ⁺¹ ₋₀ | 13.0±0.3 | 15.4±1 | 13.0±0.2 | 21.0±0.8 | 2.0±0.5 |
| 3.2×1.3×1.3mm | 180±2 | 60 ⁺¹ ₋₀ | 9.0 ^{+0.0} _{-1.0} | 140min. | 13.0±0.2 | 21.0±0.8 | 2.0±0.5 |

| Code | A ₀ | B ₀ | W | F | E | P ₁ | P ₂ | P ₀ | D ₀ | D ₁ | T | T ₂ | K |
|---------------|----------------|----------------|-----------|-----------|----------|----------------|----------------|----------------|--------------------------------------|--------------------------------------|-----------|----------------|----------|
| 7.4×3.4×2.0mm | 3.80±0.1 | 7.80±0.1 | 16.00±0.3 | 7.50±0.1 | 1.75±0.1 | 8.00±0.1 | 2.0±0.1 | 4.00±0.1 | 1.50 ^{-0.1} _{-0.0} | 1.50 ^{-0.1} _{-0.0} | 0.30±0.05 | 2.45±0.2 | 2.40±0.2 |
| 4.5×2.0×1.2mm | 2.20±0.1 | 4.70±0.1 | 12.00±0.2 | 5.5±0.05 | 1.75±0.1 | 4.00±0.1 | 2.0±0.05 | 4.00±0.1 | 1.50 ^{-0.1} _{-0.0} | 1.0±0.1 | 0.30±0.05 | 1.85max. | 1.80max. |
| 3.2×1.3×1.3mm | 1.50±0.1 | 3.40±0.1 | 8.00±0.2 | 3.50±0.05 | 1.75±0.1 | 4.00±0.1 | 2.0±0.05 | 4.00±0.1 | 1.50 ^{-0.1} _{-0.0} | 1.0 ^{+0.2} _{-0.0} | 0.25±0.05 | 1.30max. | 0.90±0.1 |

* 7.4×3.4×2.0mm=PBRC-G, PBRC-H, PBRV-G, PBRV-H 2000pcs./Reel
 4.5×2.0×1.2mm=PBRC-L, PBRC-M, PBRV-L, PBRV-M 3000pcs./Reel
 3.2×1.3×1.3mm=PRQC-S, PRQV-S 3000pcs./Reel