



MHz Band Ceramic Chip Resonators (SMD) PBRC-H / PBRC-M / PRQC Series

for Consumer Applications



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

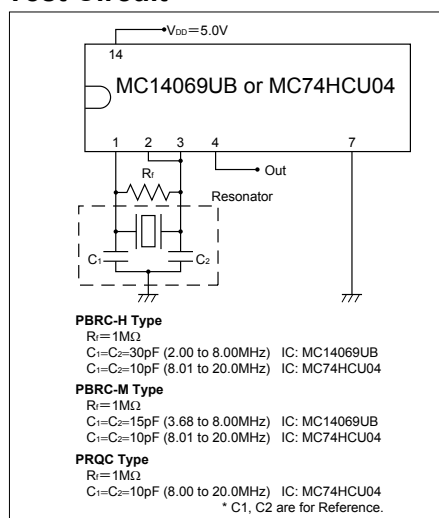
⑧ Unique Code

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

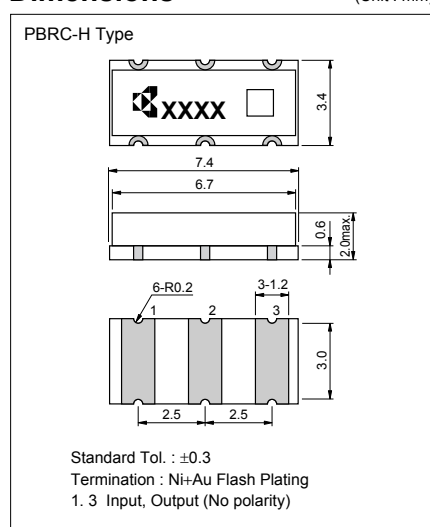


Note)

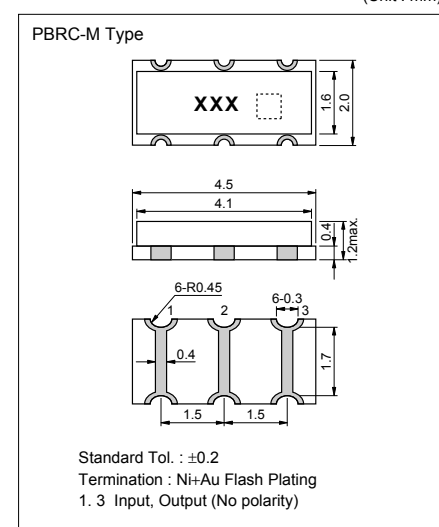
- This product includes built-in capacitors, but values may not be the most appropriate depending on IC's.
- Evaluation of circuit with IC is necessary. IC circuit matching may be referenced with
 - 1) IC data books
 - 2) List of Recommended circuits in Kyocera website.
- Please contact IC manufacturer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

Dimensions

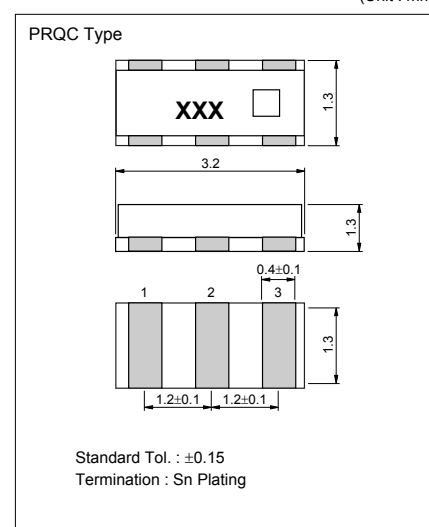
(Unit : mm)



(Unit : mm)



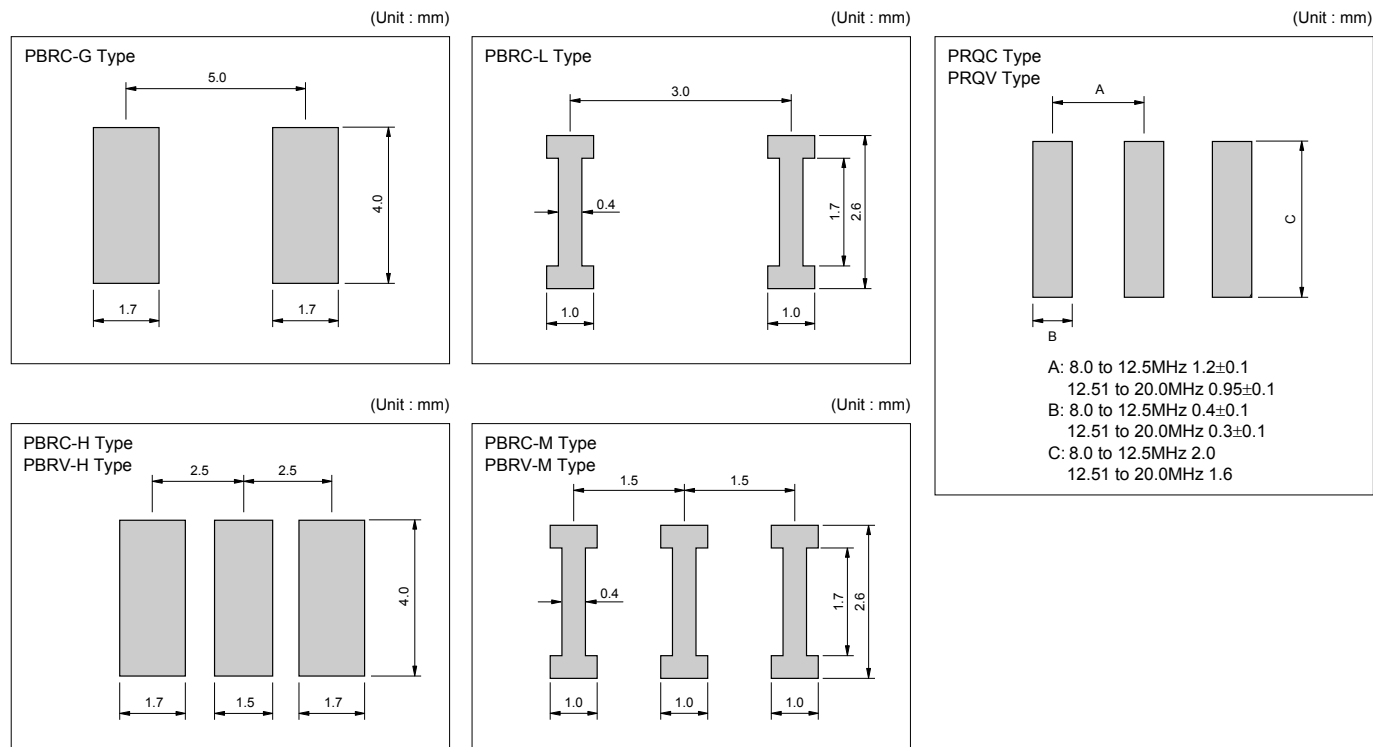
(Unit : mm)



#	Pin #
1	Input
2	Ground
3	Output

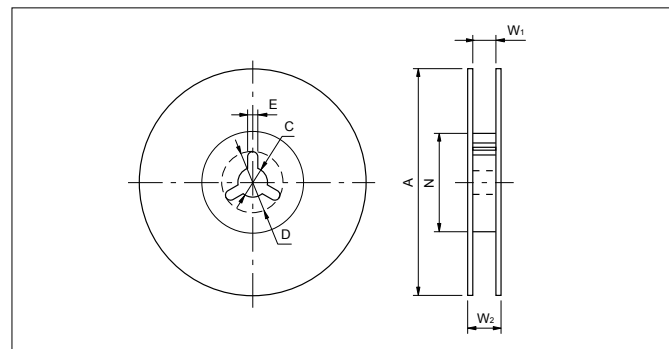


Recommended Land Pattern

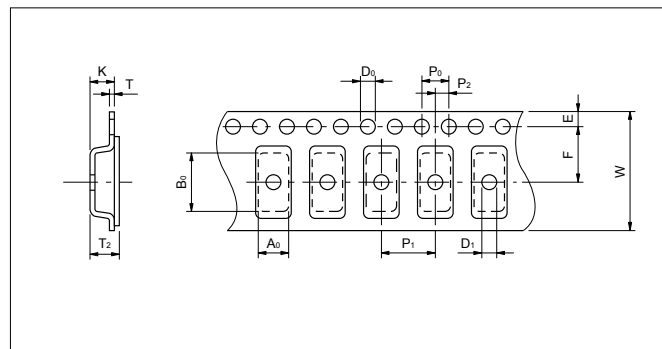


Packaging

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