

# PBRC -B, -D Series Chip Resonators

## Built-in Capacitor MHz Band SMT Resonators

$f_o$ : 2.00 to 36.00 MHz

### FEATURES

- 1) Built-in load capacitor
- 2) High reliability chip resonator in a ceramic case which can be reflow soldered and washed
- 3) Ultra-miniature size is suitable for compact equipment and high mounting density
- 4) Rectangular shape allows easy "pick and place" operation
- 5) 2000 pcs. per reel
- 6) Sold in increments of 2000 pcs.

### HOW TO ORDER

**PBRC - 4.00 B R**

- ① Type: (Piezo Bulk Resonator Chip)
- ② Oscillation frequency (MHz)
- ③ Resonator type:  
B = With capacitor (2.00~20.00MHz)  
D = With capacitor (20.01~36.00MHz)
- ④ Packaging:  
R = Tape and reel
- ⑤ Frequency tolerance:  
□ = ±0.5% (2.00~8.00MHz)  
07 = ±0.7% (8.01~20.00MHz)  
□ = ±0.5% (20.01~36.00MHz)



### STRUCTURE



### SPECIFICATIONS (PBRC-□B/PBRC-□D)

Series Type	B		D
Frequency Range	2.00 to 8.00 MHz		8.01 to 20.00 MHz
Load Capacitor	33 pF (typ.)		10 pF (typ.)
Frequency Tolerance	±0.5%		±0.7%
Resonant Impedance	2.00-2.90MHz 3.00-3.57MHz 3.58-8.00MHz	200Ω max. 100Ω max. 30Ω max.	150 Ω Max. 150 Ω Max. 150 Ω Max.
Temperature Characteristics (-20 to +80°C)	±0.3%		±0.1%

### RECOMMENDED LAND PATTERN FOR PBRC-□B/D



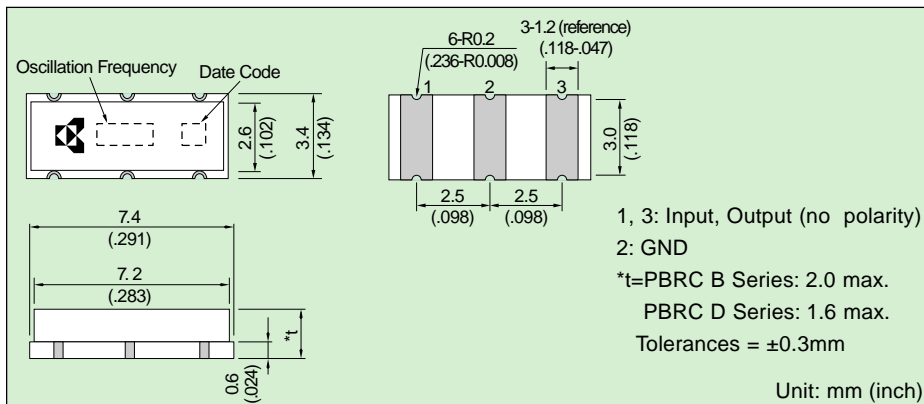
### STANDARD TEST CIRCUIT 2.00 ~ 8.00 MHz



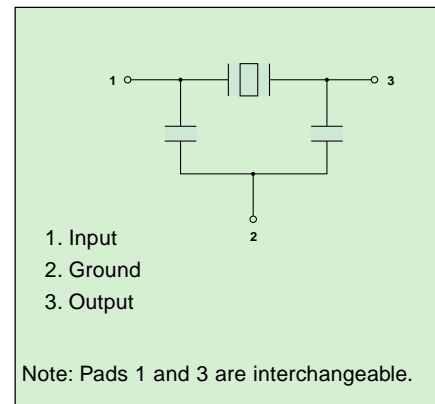
### STANDARD TEST CIRCUIT 8.01 ~ 36.00 MHz



### DIMENSIONS



### PAD CONNECTION



# Tape & Reel Packaging

## Surface Mountable Chip Resonators PBRC -A, -B, -D Types

2000 pieces per reel with 10 positions open at beginning and end of reel. Leader will be 200mm maximum.

### TAPE DIMENSIONS

A	B	D	E	F	G	H	J	φK	M	R	W	T	φL
±0.2	±0.2	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1			±0.2	±0.1	±0.05
3.8	7.8	16.0	7.5	1.75	8.0	4.0	2.0	1.5	10°max	0.3max	2.1	0.3	1.55



Units:mm

### REEL DIMENSIONS

A	B	C	D	E	R	W	T
255	80	13	25	2	1.0R	17.5	2
±1.0	±0.5	±0.5	±0.8	±0.5		±1.5	±0.5



Units:mm

### PACKING METHOD



### TEST CONDITION OF PEELING STRENGTH



### MARKING

#### Marking of Reel

- Type Name
- Lot No.
- Quantity
- Vendor Name

#### Marking of Exterior Package

- Type Name
- Lot No.
- Quantity of Reel
- Shipping Date
- Vendor Name

### REFLOW PROFILE

