## PBC6T(K) PBC6XT(K)

### **■** FEATURES

- Elegant Cabinet Styling Protected by Steel Mesh
- Choose Coaxial or Twin Cone
- · Horizontal or Vertical Mount
- · Ported to Enhance Bass
- Horizontal or Vertical Mount
- Dual 70.7/25-volt Transformer with Spade-lug Taps

### **■** DESCRIPTION

Classy is a great word to describe the Penton Audio PBC Series surfacemount speaker packages. Not only decorative, but sturdy, the curved ABS housings are equipped with dual-voltage (70.7/25) transformers and 6" cone loudspeakers which exhibit wider coverage angles than typical 8" cones.

The PBC6T(K) uses a 10-watt, twincone loudspeaker with 5-ounce magnet, while the 15-watt PBC6XT(K) uses a coaxial loudspeaker with 10-ounce ceramic magnet. Tweeter has a 1" Mylar dome with 1/2" moving coil and neodymium magnet.

The white ABS molded cabinets are loaded with customer-centric features including UV inhibitors, optional volume control, bass port, mounting hole covers, transformer tap selection via movable spade lugs and connection via a terminal block.

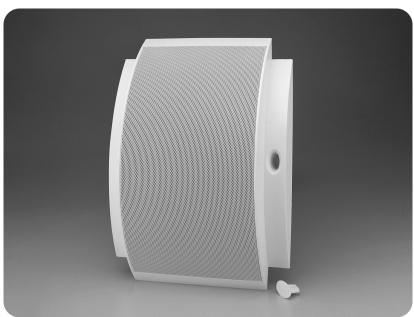
### **APPLICATION**

Offering the first serious alternative to conventional wooden wall baffles, the PBC Series can be mounted in class-rooms, malls, atriums, church fellowship halls, meeting rooms and other venues where recessed speaker systems are not practical.

The PBC cabinet mounts easily with provided hole cover caps and customer supplied hardware. In the vertical orientation mounting uses the keyhole bracket. Horizontal attachment is made using the two front mounting holes. For audio connection, mount over electrical box or by allowing cable entry through either of 2 provided cutouts.

# **6" Surface-mount Speaker Packages with Optional Volume Controls**





### **■** SPECIFICATIONS

- SPEAKER CONE SIZE: 6-1/2" (152 mm)
- SPEAKER TYPE

PBC6T(K): Twin Cone
PBC6XT(K): Coaxial with 1"

PBC6XT(K): Coaxial with 1" tweeter

FREQUENCY RESPONSE (SEE Fig 1)

PBC6T(K): 110-20,000 Hz ± 6 dB PBC6XT(K): 90-20,000 Hz ± 6 dB

• POWER HANDLING (Raw Driver)

PBC6T(K): 10 watts PBC6XT(K): 15 watts

• SPL @ 1w 1m

PBC6T(K): 94 dB PBC6XT(K): 91 dB

• PBC6XT(K) TWEETER TYPE:

1" Mylar Dome with 1/2" Moving Coil and Neodymium Magnet

• DISPERSION @ 2 KHz (6 dB Down)

PBC6T(K): 115° PBC6XT(K): 120°

• DIRECTIVITY Q FACTOR @ 2 kHz:

PBC6T(K): 7.1 PBC6XT(K): 5.1

CONE MATERIAL

PBC6T(K): Paper

PBC6XT(K): Polypropylene with Rubber Surround

MAGNET WEIGHT

PBC6T(K): 5.34 oz PBC6XT(K): 10.0 oz

• TRANSFORMER TAP CHANGE:

Movable Spade Lug

CONNECTION:

Terminal Block

TRANSFORMER MAX INSERTION LOSS

PBC6T(K): 1.5 dB PBC6XT(K): 0.8 dB

• 70.7-VOLT TRANSFORMER TAPS PBC6T(K): 5, 2, 1, 0.5, 0.25 PBC6XT(K): 8, 5, 2, 1, 0.5

 70.7-VOLT TRANSFORMER IMPEDANCE PBC6T(K): 1K, 2.5K, 5K, 10K, 20K PBC6XT(K): 625, 1.25K, 2.5K, 5K, 10K

• **25-VOLT TRANSFORMER TAPS:** PBC6T(K): 5, 2, 1, 0.625, 0.25 PBC6XT(K): 8, 4, 2, 1, 0.5

• 25-VOLT TRANSFORMER IMPEDANCE PBC6T(K): 125, 312, 625, 1K, 2.5K PBC6XT(K): 78, 156, 312, 625, 1.25K

• APPROVALS:

SUPPLIED MATCHING ACCESSORIES:
 2 ea. Caps for Recessed Holes; Volume-control Knob

BAFFLE MATERIAL:

Molded ABS housing with UV Inhibitor and Steel Mesh Grille

FINISH:

Non-reflective White

DIMENSIONS, INCH (MM):

13 x 9.45 x 3.54 (330 x 240 x 90)

NET WEIGHT LBS (KGS)

PBC6T(K): 1.56 (1.16) PBC6XT(K): 3.00 (1.36)

### PBC6T(K) PBC6XT(K)

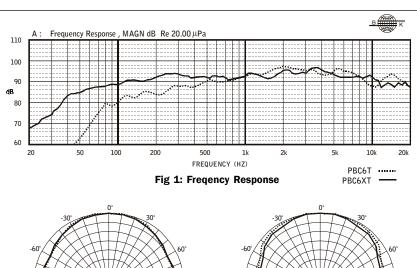
## ■ ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:

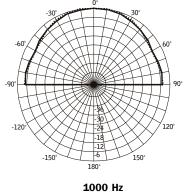
Unit shall be Penton Audio USA Model (PBC6T(K), PBC6XT(K)) or approved equal. Assembly shall be comprised of a 6-1/2" loudspeaker, factory-mounted dual-voltage 70.7/25-volt transformer and wall baffle.

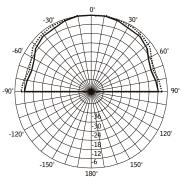
Grille shall be aesthetically pleasing, constructed of molded high-impact ABS with UV inhibitors used throughout. Grille screen shall be steel mesh with a baked-on epoxy paint. Entire housing to be finished in matching white.

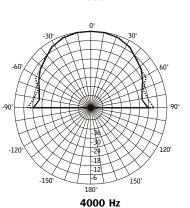
PBC6T(K) shall have a twin-cone loudspeaker with 5-ounce magnet. Cone shall be treated paper, a damped, high-compliance type with smooth extended response over a range of 110 to 20,000 Hz and 115° dispersion. Sensitivity shall be a minimum of 94 dB. Transformer shall have power taps of 5, 2, 1, 0.5 and 0.25 watts. Insertion loss shall not exceed 1.5 dB.

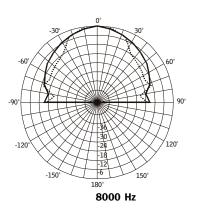
PBC6XT(K) assembly shall be comprised of a coaxial 6" loudspeaker with 10-ounce magnet, and 1" Mylar dome tweeter complete with a 1/2" moving coil as well as a neodymium magnet. Dispersion shall be 120°. Cone shall be polypropylene with rubber surround, a damped, high-compliance type with smooth extended response over a range of 90-20,000 Hz. Sensitivity shall be a minimum of 91 dB. Transformer shall have power taps of 8, 4,2, 1 and 0.5 watts. Insertion loss shall not exceed 0.8 dB.





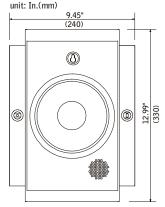






2000 Hz

Fig 2: Polar Patterns



PBC6T(K)			PBC6XT(K)		
Watt	25V	70.7V	Watt	25V	70.7V
PIN8		0.25	PIN8		0.5
PIN7		0.5	PIN7		1
PIN6		1	PIN6		2
PIN5	0.25	2	PIN5	0.5	4
PIN4	0.625	5	PIN4	1	8
PIN3	1		PIN3	2	
PIN2	2		PIN2	4	
PIN1	5		PIN1	8	
Black	COM	COM	Black	COM	COM

Fig 5: Wattage Tappings

Fig 3: Side View Fig 4: Front View

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PENTON

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