

# Type OTB DC/AC Dual Rated Capacitors

## Protected, High Voltage, Paper-Film/Foil Capacitors for AC & DC Applications



Type OTB is a capacitor with a robust construction consisting of a paper or a combination of paper and film dielectric system with foil electrodes, and is protected by a pressure sensitive interrupter. The OTB may be used for all normal DC blocking, filtering and bypass applications as well as AC motor-run and other 60 Hz applications. Type OTB is supplied in an oval metal case with easy to use solder lug terminals positioned in plastic insulator cups.

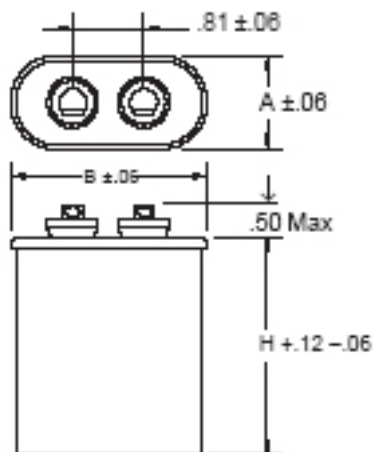
### Highlights

- Protected: Pressure sensitive interrupter
- Good for DC and 60 Hz AC applications

### Specifications

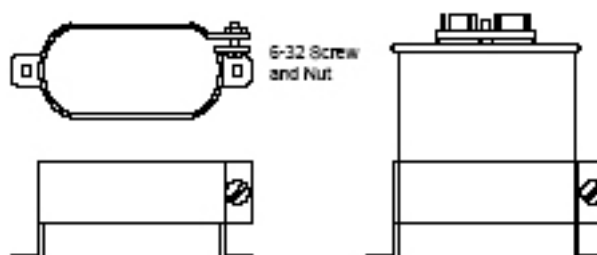
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|--|--|
| Capacitance Range                      | 0.1 $\mu$ F to 35.0 $\mu$ F  |
| Capacitance Tolerance                  | $\pm 10\%$   |
| Rated Voltage                          | 400 Vdc / 236 Vac    600 Vdc / 330 Vac<br>1000 Vdc / 440 Vac    1500 Vdc / 660 Vac<br>2000 Vdc / 700 Vac    2500 Vdc / 800 Vac<br>3000 Vdc / 950 Vac   |
| Operating Temperature Range            | -55 °C to +85 °C   |
| Service Life Objective                 | The service life objective for this series is 60,000 hours of operating life with a 90% survival rate when operated at full voltage and at rated ambient temperature. Capacitors are frequently used at voltages and ambient temperatures other than rated conditions. Service life may be estimated under specific conditions of temperature and voltage by contacting CDE engineering. |
| <a href="#">Regulatory Information</a> |  |

### Outline Drawing



### Mounting Brackets

| Case Code | Dimensions (inches) |      | Brackets  |                |
|-----------|---------------------|------|-----------|----------------|
|           | A                   | B    | Universal | Wrap Around    |
| A         | 1.31                | 2.16 | 32107-1   | 30393-5 or OB2 |
| C         | 1.91                | 2.91 | 32107-2   | 30393-9 or OB4 |
| D         | 1.97                | 3.66 | 32107-3   | OB3            |



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## Ratings

| Cap (µF)                                     | Catalog Part Number | A (Inches) | B (Inches) | H (Inches) |
|--|---------------------|------------|------------|------------|
| <b>400 Vdc (236 Vac) - Paper Dielectric</b>  |                     |            |            |            |
| 3.0  | OTBE305KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 4.0  | OTBE405KNPIR-F      | 1.31       | 2.16       | 2.38       |
| 5.0  | OTBE505KNPIR-F      | 1.31       | 2.16       | 2.63       |
| 6.0  | OTBE605KNPIR-F      | 1.31       | 2.16       | 2.88       |
| 8.0  | OTBE805KNPIR-F      | 1.31       | 2.16       | 3.88       |
| 10.0   | OTBE106KNPIR-F      | 1.31       | 2.16       | 4.75       |
| 12.0   | OTBE126KNPIR-F      | 1.91       | 2.91       | 3.13       |
| 15.0   | OTBE156KNPIR-F      | 1.91       | 2.91       | 3.50       |
| 20.0   | OTBE206KNPIR-F      | 1.91       | 2.91       | 4.75       |
| 25.0   | OTBE256KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 30.0   | OTBE306KNPIR-F      | 1.91       | 2.91       | 6.75       |
| <b>600 Vdc (330 Vac) - Paper Dielectric</b>  |                     |            |            |            |
| .50  | OTBF504KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 1.0  | OTBF105KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 2.0  | OTBF205KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 3.0  | OTBF305KNPIR-F      | 1.31       | 2.16       | 2.38       |
| 4.0  | OTBF405KNPIR-F      | 1.31       | 2.16       | 2.63       |
| 5.0  | OTBF505KNPIR-F      | 1.31       | 2.16       | 3.13       |
| 6.0  | OTBF605KNPIR-F      | 1.31       | 2.16       | 3.88       |
| 8.0  | OTBF805KNPIR-F      | 1.31       | 2.16       | 4.75       |
| 10.0   | OTBF106KNPIR-F      | 1.91       | 2.91       | 3.13       |
| 12.0   | OTBF126KNPIR-F      | 1.91       | 2.91       | 3.88       |
| 15.0   | OTBF156KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 20.0   | OTBF206KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 25.0   | OTBF256KNPIR-F      | 1.91       | 2.91       | 6.75       |
| 30.0   | OTBF306KNPIR-F      | 1.97       | 3.66       | 6.25       |
| 35.0   | OTBF356KNPIR-F      | 1.97       | 3.66       | 7.25       |
| <b>1000 Vdc (440 Vac) - Paper Dielectric</b> |                     |            |            |            |
| .10  | OTBG104KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .25  | OTBG254KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .50  | OTBG504KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 1.0  | OTBG105KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 2.0  | OTBG205KNPIR-F      | 1.31       | 2.16       | 2.63       |
| 3.0  | OTBG305KNPIR-F      | 1.31       | 2.16       | 3.13       |
| 4.0  | OTBG405KNPIR-F      | 1.31       | 2.16       | 4.25       |
| 5.0  | OTBG505KNPIR-F      | 1.31       | 2.16       | 4.75       |
| 6.0  | OTBG605KNPIR-F      | 1.91       | 2.91       | 3.13       |
| 8.0  | OTBG805KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 10.0   | OTBG106KNPIR-F      | 1.91       | 2.91       | 4.75       |
| 12.0   | OTBG126KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 15.0   | OTBG156KNPIR-F      | 1.91       | 2.91       | 7.25       |
| 20.0   | OTBG206KNPIR-F      | 1.97       | 3.66       | 7.25       |
| 25.0   | OTBG256KNPIR-F      | 1.97       | 3.66       | 9.00       |

| Cap (µF)  | Catalog Part Number | A (Inches) | B (Inches) | H (Inches) |
|---|---------------------|------------|------------|------------|
| <b>1500 Vdc (660 Vac) - Film/Paper Dielectric</b> |                     |            |            |            |
| .50   | OTBH504KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 1.0   | OTBH105KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 2.0   | OTBH205KNPIR-F      | 1.31       | 2.16       | 3.13       |
| 3.0   | OTBH305KNPIR-F      | 1.31       | 2.16       | 4.25       |
| 4.0   | OTBH405KNPIR-F      | 1.91       | 2.91       | 3.13       |
| 5.0   | OTBH505KNPIR-F      | 1.91       | 2.91       | 3.50       |
| 6.0   | OTBH605KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 8.0   | OTBH805KNPIR-F      | 1.91       | 2.91       | 5.25       |
| 10.0  | OTBH106KNPIR-F      | 1.97       | 3.66       | 5.25       |
| 12.0  | OTBH126KNPIR-F      | 1.97       | 3.66       | 5.75       |
| 15.0  | OTBH156KNPIR-F      | 1.97       | 3.66       | 6.75       |
| <b>2000 Vdc (700 Vac) - Film/Paper Dielectric</b> |                     |            |            |            |
| .10   | OTBJ104KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .25   | OTBJ254KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .50   | OTBJ504KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 1.0   | OTBJ105KNPIR-F      | 1.31       | 2.16       | 2.63       |
| 2.0   | OTBJ205KNPIR-F      | 1.31       | 2.16       | 4.25       |
| 3.0   | OTBJ305KNPIR-F      | 1.91       | 2.91       | 3.50       |
| 4.0   | OTBJ405KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 5.0   | OTBJ505KNPIR-F      | 1.91       | 2.91       | 4.75       |
| 6.0   | OTBJ605KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 8.0   | OTBJ805KNPIR-F      | 1.97       | 3.66       | 5.75       |
| 10.0  | OTBJ106KNPIR-F      | 1.97       | 3.66       | 6.75       |
| <b>2500 Vdc (800 Vac) - Film/Paper Dielectric</b> |                     |            |            |            |
| .50   | OTBK504KNPIR-F      | 1.31       | 2.16       | 2.13       |
| 1.0   | OTBK105KNPIR-F      | 1.91       | 2.91       | 2.88       |
| 2.0   | OTBK205KNPIR-F      | 1.91       | 2.91       | 3.13       |
| 3.0   | OTBK305KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 4.0   | OTBK405KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 5.0   | OTBK505KNPIR-F      | 1.91       | 2.91       | 6.75       |
| 6.0   | OTBK605KNPIR-F      | 1.97       | 3.66       | 5.75       |
| 7.0   | OTBK705KNPIR-F      | 1.97       | 3.66       | 6.75       |
| 8.0   | OTBK805KNPIR-F      | 1.97       | 3.66       | 7.25       |
| <b>3000 Vdc (950 Vac) - Film/Paper Dielectric</b> |                     |            |            |            |
| .10   | OTBL104KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .25   | OTBL254KNPIR-F      | 1.31       | 2.16       | 2.13       |
| .50   | OTBL504KNPIR-F      | 1.91       | 2.91       | 2.88       |
| 1.0   | OTBL105KNPIR-F      | 1.91       | 2.91       | 2.88       |
| 2.0   | OTBL205KNPIR-F      | 1.91       | 2.91       | 4.25       |
| 3.0   | OTBL305KNPIR-F      | 1.91       | 2.91       | 5.75       |
| 4.0   | OTBL405KNPIR-F      | 1.97       | 3.66       | 5.75       |
| 5.0   | OTBL505KNPIR-F      | 1.97       | 3.66       | 6.75       |

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