SPB series IGBT Snubbering applications





FEATURES

- · Dry type structure
- · High voltage, high frequency circuit
- Low ESL/ ESR
- Self-healing
- RoHs compliant

APPLICATIONS

- IGBT snubbering
- Solar/Wind inverter
- Power supply
- Induction heater machine
- Frequency inverter

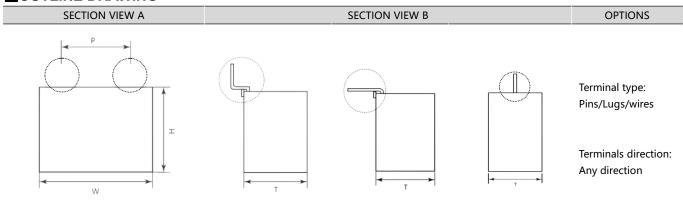
SPB SERIES IGBT SNUBBER CAPACITOR

SPB series is plastic box sealed capacitor with lug terminals, especially designed as snubber parts for IGBT, In order to block voltage peaks, snubber capacitors are typically connected in parallel with semiconductors. CABO offering includes axial and radial configurations, as well as a full line of low inductance, direct-mount IGBT snubbers. All designs feature high dV/dt capability to meet the peak current demands of inverter switching.

ELECTRICAL CHARACTERISTICS

| Capacitance Range: | 0.047∼10µF | | | |
|----------------------------------|--|--|--|--|
| Operating Temperature: | -40℃~+85℃ (case) | | | |
| Capacitance Tolerance: | ±5%(J);±10% (K) | | | |
| Rated Voltage (U _n): | 630~3000V _{dc} | | | |
| Test Voltage between Terminal: | 1.5~1.75U _n 60s | | | |
| Dissipation factor: | Tgσ≤0.0008 (10kHz, 20°C) | | | |
| Insulation Resistance: | ≥3000s but need not exceed 30GΩ | | | |
| Dv/Dt: | >200V/µs | | | |
| Flame Resistance: | UL 94 V-0 | | | |
| Leads: | Pins, tinned copper lugs, wire | | | |
| Lifetime Expectancy: | ≥100,000Hours (U _n , θ _{hs} ≤70°C) | | | |

OUTLINE DRAWING



Box type snubber Capacitors

CABO

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COMMON DESIGN

| Rated voltage | CAP(µF) | Dimensions (mm) | | | Pitch (mm) | \\\-:-\-\(\(\) |
|---|----------------|-----------------|------|------|------------|-----------------|
| Un | C _n | W | Т | Н | Р | Weight (g) |
| 630V _{dc} /420V _{ac} | 0.47 | 38 | 20 | 30 | 20~27 | 23 |
| | 1.0 | 37 | 22 | 32 | 20~26 | 26 |
| | 2.0 | 42.5 | 33.5 | 35.5 | 23~26 | 51 |
| | 5.0 | 57.5 | 35 | 50 | 23~41 | 101 |
| 1200V _{dc} /600V _{ac} | 0.33 | 38 | 20 | 30 | 20~27 | 23 |
| | 0.47 | 38 | 20 | 30 | 20~27 | 23 |
| | 0.68 | 37 | 22 | 32 | 20~26 | 26 |
| | 1.0 | 42.5 | 33.5 | 35.5 | 23~26 | 51 |
| | 3.0 | 57.5 | 35 | 50 | 23~41 | 101 |
| 1700V _{dc} - /675V _{ac} - | 0.22 | 38 | 20 | 30 | 20~27 | 23 |
| | 0.33 | 38 | 20 | 30 | 20~27 | 23 |
| | 0.47 | 38 | 25 | 34 | 20~27 | 32 |
| | 0.68 | 42.5 | 33.5 | 35.5 | 23~26 | 51 |
| | 1.0 | 42.5 | 30 | 45 | 23~26 | 57 |
| 2000V _{dc} - /700V _{ac} - | 0.22 | 37 | 22 | 32 | 20~26 | 26 |
| | 0.47 | 42.5 | 33.5 | 35.5 | 23~26 | 51 |
| | 1.0 | 57.5 | 30 | 45 | 26~41 | 78 |
| 3000V _{dc} /750V _{ac} | 0.1 | 38 | 25 | 34 | 20~27 | 32 |
| | 0.33 | 57.5 | 30 | 45 | 26~41 | 78 |
| | 0.68 | 57.5 | 38 | 54 | 26~41 | 118 |

^{*} CABO reserves the right to make changes without further notice to any products herein to improve reliability, function or design.

■RELATED CAPACITOR SERIES



CABO is a leading brand of high reliability capacitors, providing specifically designed solutions to meet the reliability needs of industrial, military, medical and specialized applications worldwide.

As a well-known brand of China, CABO capacitors are among the world's most reliable component. Focus on High-End global markets and High reliability request fields, providing customization services. With world-class design, testing and manufacturing facilities in China, enable the quick turn-around for fast and mass delivery worldwide.

Our extensive custom design and development capabilities coupled with standardized mass production capacity offerings allow us to be a competitive option for power electronics industry.

^{*} Other values and dimensions are available on request.