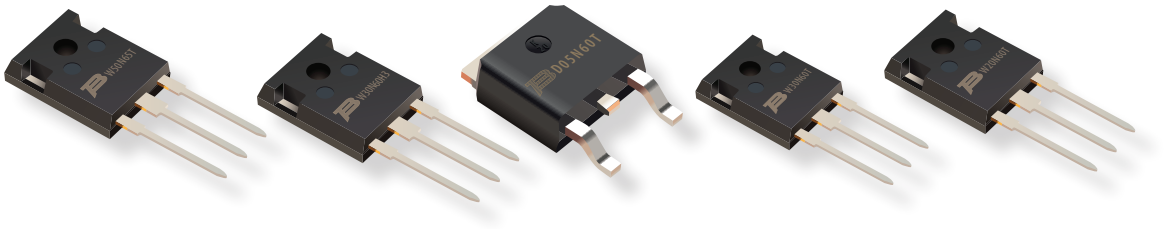
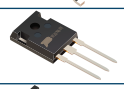
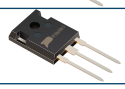


Bourns Announces the Release of the Insulated Gate Bipolar Transistor (IGBT) Discrete Solution

Model BID Series

Riverside, California – August 5, 2022 – Bourns, Inc., a leading manufacturer and supplier of electronic components, is pleased to introduce the Model BID Series Insulated Gate Bipolar Transistor (IGBT) Discrete Solution. By combining technology from a MOSFET gate and a bipolar transistor, the Bourns® IGBT Discrete BID Series creates a component designed for high voltage and high current applications. This device uses advanced Trench-Gate Field-Stop technology to provide greater control of the dynamic characteristics, which, in turn, results in a lower Collector-Emitter Saturation Voltage ($V_{CE(sat)}$) and fewer switching losses. In addition, due to the thermally efficient TO-252, TO-247 and TO-247N packages, the devices can provide a lower thermal resistance $R_{th(j-c)}$, making them suitable IGBT solutions for Switch-Mode Power Supplies (SMPS), Uninterruptible Power Sources (UPS), and Power Factor Correction (PFC) applications.

The material characteristics of the devices, their features and potential applications are provided below*.

Model	Photo	Package	Feature	V_{CES} (V)	I_C @ T=100 °C (A)	Typ. $V_{CE(sat)}$ @ I_C, V_{ge}=15 V (V)	I_F @T=100 °C (A)	Operating Junction Temperature
BIDD05N60T		TO-252	Medium Speed	600	5	1.5	—	-55 °C to +150 °C
BIDW20N60T		TO-247	Medium Speed	600	20	1.7	20	-55 °C to +150 °C
BIDW30N60T		TO-247	Medium Speed	600	30	1.65	30	-55 °C to +150 °C
BIDW50N65T		TO-247	Medium Speed	650	50	1.65	50	-55 °C to +150 °C
BIDNW30N60H3		TO-247N	High Speed	600	30	1.65	12	-55 °C to +150 °C

T_C = 25 °C Unless otherwise specified

~ continued on page 2 ~

ESD2235

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Model BIDD05N60T

Features

- 600 V, 5 A, low Collector-Emitter Saturation Voltage ($V_{CE(sat)}$)
- Trench-Gate Field-Stop technology
- Optimized for conduction
- Robust
- RoHS compliant*

Applications

- SMPS
- UPS
- PFC

Model BIDW20N60T

Features

- 600 V, 20 A, low Collector-Emitter Saturation Voltage ($V_{CE(sat)}$)
- Trench-Gate Field-Stop technology
- Optimized for conduction
- Low switching loss
- RoHS compliant*

Applications

- SMPS
- UPS
- PFC
- Stepper motors

Model BIDW30N60T

Features

- 600 V, 30 A, low Collector-Emitter Saturation Voltage ($V_{CE(sat)}$)
- Trench-Gate Field-Stop technology
- Optimized for conduction
- RoHS compliant*

Applications

- SMPS
- UPS
- PFC
- Induction heating

Model BIDW50N65T

Features

- 650 V, 50 A, low Collector-Emitter Saturation Voltage ($V_{CE(sat)}$)
- Trench-Gate Field-Stop technology
- Optimized for conduction
- RoHS compliant*

Applications

- SMPS
- UPS
- PFC
- Inverters

Model BIDNW30N60H3

Features

- 600 V, 30 A, low Collector-Emitter Saturation Voltage ($V_{CE(sat)}$)
- Trench-Gate Field-Stop technology
- Low switching loss
- Fast switching
- RoHS compliant*

Applications

- SMPS
- UPS
- PFC
- Induction heating

Product data sheets with detailed specifications can be viewed on the Bourns website at www.bourns.com/products/IGBT.

If you have questions or need additional information, please feel free to contact Bourns Customer Service / Inside Sales.

* *RoHS Directive 2015/863, Mar 31, 2015 and Annex.*