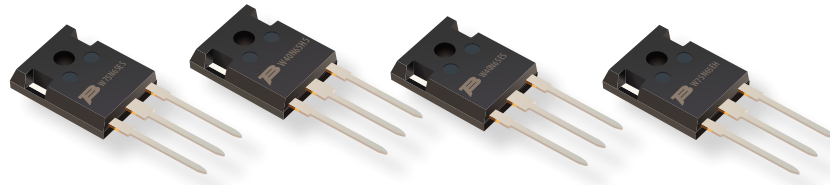




# PRODUCT EXTENSION RELEASE

## INSULATED GATE BIPOLAR TRANSISTORS (IGBTs)



### Bourns Announces the Expansion of its IGBT Discrete Model BID Series Solution

Riverside, California – February 2, 2024 – The Bourns® IGBT discrete Model BID Series combines technology from a MOSgate and a bipolar transistor, creating an ideal component for high voltage and high current applications. These devices use advanced Trench-Gate Field-Stop technology, providing greater control of the dynamic characteristics while resulting in a lower Collector-Emitter Saturation Voltage ( $V_{CE(sat)}$ ) and fewer switching losses. A positive  $V_{CE(sat)}$  temperature coefficient and tight parameter distribution result in safer paralleling operation.

These Bourns® IGBT products are suitable designs for Switched-Mode Power Supplies (SMPS), Uninterruptible Power Supplies (UPS) and Power Factor Correction (PFC) applications.

Part Number	Image	Package	Key Features	$V_{CE}$ (V)	$I_C$ @ $T=100^\circ\text{C}$ (A)	Typ. $V_{CE(sat)}$ @ $I_C, V_{ge}=15\text{V}$ (V)	$I_F$ @ $T=100^\circ\text{C}$ (A)	Operating Temperature Range ( $^\circ\text{C}$ )
<a href="#">BIDW40N65H5</a>		TO-247-3L	High speed	650	40	1.65	20	-40 to +175
<a href="#">BIDW40N65E55</a>		TO-247-3L	Efficient Medium Speed	650	40	1.35	40	-40 to +175
<a href="#">BIDW75N65EH5</a>		TO-247-3L	Efficient High Speed	650	75	1.65	75	-40 to +175
<a href="#">BIDW75N65E55</a>		TO-247-3L	Efficient Medium Speed	650	75	1.42	75	-40 to +175

ESD2331

Product data sheets with detailed specifications can be viewed on the Bourns website at [www.bourns.com](http://www.bourns.com). Should you have any questions or need additional information, please contact [Bourns Customer Service/ Inside Sales](#).

For additional information on Bourns® IGBTs including Application Notes, White Papers and Product Guides, please visit the [Bourns® IGBT Technical Library](#).

### Features

- Novel trench-gate field-stop technology
- Optimized for conduction
- Maximum operating  $T_j = +175\text{ }^\circ\text{C}$
- RoHS compliant\*

### Applications

- Switched-Mode Power Supplies (SMPS)
- Uninterruptible Power Supplies (UPS)
- Power Factor Correction (PFC)
- Inverters
- Welding converters
- Photovoltaic

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