

# High-Efficiency 1200V TFS IGBT Series in TO-247AB

## 1200V IGBT



### Features

- 1200V Trench Field Stop (TFS) IGBT technology
- TO-247AB package with 40A–80A current ratings
- Low conduction and switching losses
- Integrated fast, soft-recovery anti-parallel diodes
- Automotive-grade options: AEC-Q101 qualified,  $T_j(\text{max}) = 150^\circ\text{C}$
- Industrial-grade options:  $T_j(\text{max}) = 175^\circ\text{C}$



### Benefits

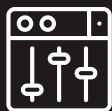
Low conduction & switching losses reduce device dissipation, improving system efficiency, relaxing heatsink & cooling requirements, & enabling higher power density in constrained layouts.

Integrated fast, soft-recovery anti-parallel diodes cut reverse-recovery overshoot & EMI, simplifying EMC compliance, reducing external snubber & filter demands.

### Applications



CNC spindle drives



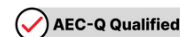
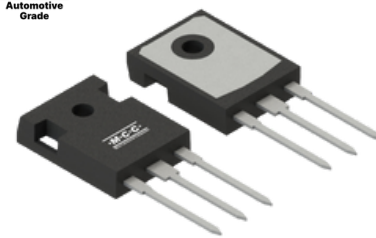
Static transfer switches



steering wheel heating modules



## Low Loss, High Reliability, & Smooth Switching for Demanding Power Applications



# Drive More Power with Confidence with MCC 1200V TFS IGBT Series

## Product Attributes, Parametrics & Datasheets

Product	Type	Package	DC Collector Current @ Tc=100°C IC (A)	Collector-Emitter Voltage VCE (V)	Mounting Type	AEC-Q101 Qualified	Datasheet
<a href="#">MIW80N120NTIYHE3</a>	IGBT Discrete	TO-247AB	80	1200	Through Hole	Yes	<a href="#">Info</a>
<a href="#">MIW80N120BTIYHE3</a>	IGBT Discrete	TO-247AB	80	1200	Through Hole	Yes	<a href="#">Info</a>
<a href="#">MIW40N120FLAHE3</a>	IGBT Discrete	TO-247AB	40	1200	Through Hole	Yes	<a href="#">Info</a>
<a href="#">MIW50N120ATIY</a>	IGBT Discrete	TO-247AB	50	1200	Through Hole	No	<a href="#">Info</a>

## Applications



### Industrial Automation

- Frequency converters
- AC/DC servo drive amplifiers
- Motor drive inverters
- Variable-speed drives for pumps and compressors
- CNC spindle drives
- Conveyor and material handling systems
- Robotics actuators

### Power Conversion

- Uninterruptible power supplies (UPS)
- Online double-conversion UPS
- Modular rack-mount UPS systems
- Industrial UPS for harsh environments
- Static transfer switches (STS)
- Power conditioning units with active PFC

### Energy and Backup

- PTC heaters (cabin and battery conditioning)
- High-voltage coolant loop heaters
- Battery pack thermal management
- Seat and steering wheel heating modules
- Defrost/defog HVAC elements

**CONTACT MCC TO REQUEST A SAMPLE**

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