



Automotive IGBT Range

## Electric Vehicle IGBT

With all efforts to improve the environment, the automotive market are transitioning into the manufacturing of more efficient, economical and eco-friendly means of transport.

Full Electric and Hybrid power units based on IGBT technologies are today entering many new markets worldwide, with the increasing drive to reduce harmful emissions.

Many national Governments worldwide have programmes in place to drive the automotive market into zero or low CO2 emissions by 2040 for new vehicle registrations, with the UK Government announcing plans to succeed in this mission by 2030. Long operational lifetime road vehicles such as goods vehicles, may require a full Electric or Hybrid technology upgrade to their power units at their mid operational lifetime to ensure compliance with the regulatory requirements.

The Zhuzhou CRRC Times Electric Co. Ltd group of companies are developing EV solutions that build on the transportation sector in advanced power electronics, machines and drives "PEMD" technology. The IGBT modules

support the electric commercial and passenger vehicle requirements.

Our Electric Vehicle IGBT product line is available in S0, S1, S2, S3 and M1 package types, covering the range of 750V to 1200V. In addition, the range offers options of flat baseplates for lower cost and pin fin geometry for higher power applications.

The devices feature low inductive designs, low switching losses and high thermal cycling capability. They provide a cost efficient and reliable product solution required by this application environment.

Our IGBT module range are designed and developed in an environment that fully complies with the automotive EV industry standards AQG-324 and IATF16949, to guarantee the highest reliability assurance.

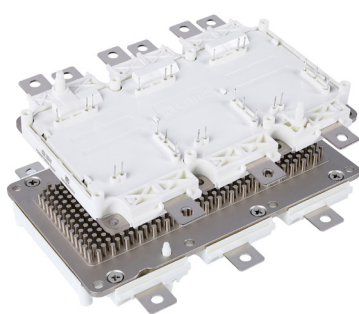
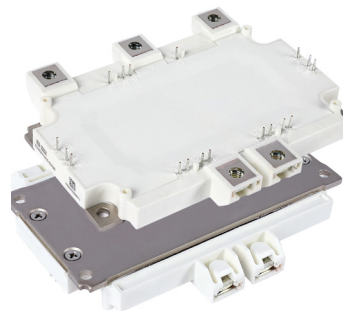
Electric and hybrid applications include:

- LGV and Electric PSV
- Motor drives
- Power charging equipment

**Electric Vehicle Parts**

 Email: [powersolutions@dynexsemi.com](mailto:powersolutions@dynexsemi.com)  
 Website: [www.dynexsemi.com](http://www.dynexsemi.com)

Part Number	Ic (A)	V	Vce (Sat)	Esw 150°C	Outline	Configuration	Baseplate Types
TG400FF08S0-S3A00	400	750	1.7	30	S0	Six Pack	Flat-Cu
TG400FF08S2-S3A00	400	750	1.75	24	S2	Six Pack	Flat-Cu
TG400FF08S2-S3A01	400	750	1.75	24	S2	Six Pack	Pin-Fin
TG660FF08S3-S4A00	660	750	1.2	46	S3-Flat	Six Pack	Flat-Cu
TG820FF08S3-S4A11	820	750	1.2	46	S3	Six Pack	Pin Fin
TG820FF08S3L-S4A11	820	750	1.25	46	S3-Long	Six Pack	Pin Fin
TG820FF08S3P-S4A11	820	750	1.25	46	S3	Six Pack	Pin Fin
TG950FF08S3-S4A01	950	750	1.2	46	S3	Six Pack	Pin Fin
TG950FF08S3L-S4A01	950	750	1.2	46	S3-Long	Six Pack	Pin Fin
TG400HF08L2-S4A00	400	750	1.35	28	L2	Half Bridge	Double Side Cooling
TG800HF08L4-S4A00	800	750	1.45	78	L4	Half Bridge	Double Side Cooling
TG600FF12S3-S4A01	600	1200	1.5	159	S3	Six Pack	Pin Fin
TG450HF12M1-S3A00	450	1200	1.65	78	M1	Half Bridge	Flat-Cu
TG600HF12M1-G3A00	600	1200	1.85	166	M1	Half Bridge	Flat-Cu


**S0 Package**

**S3 Package**

**M1 Package**

**IMPORTANT INFORMATION:** The products and information in this publication are intended for use by appropriately trained technical personnel. Due to the diversity of product applications, the information contained herein is provided as a general guide only and does not constitute any guarantee of suitability for use in a specific application. The user must evaluate the suitability of the product and the completeness of the product data for the application. The user is responsible for product selection and ensuring all safety and any warning requirements are met. Although we have endeavoured to carefully compile the information in this publication it may contain inaccuracies or typographical errors. The information is provided without any warranty or guarantee of any kind. This publication is an uncontrolled document and is subject to change without notice. When referring to it please ensure that it is the most up to date version and has not been superseded. The products are not intended for use in medical or other applications where a failure or malfunction may cause loss of life, injury or damage to property. The user must ensure that appropriate safety precautions are taken to prevent or mitigate the consequences of a product failure or malfunction. All products and materials are sold and services provided subject to Dynex's conditions of sale, which are available on request. Any brand names and product names used in this publication are trademarks, registered trademarks or trade names of their respective owners. Warning: Counterfeit Products – There are counterfeit products on the marketplace which closely resemble Dynex's genuine products. Dynex does not support the sale of products via on-line auction houses. We will be pleased to confirm the authenticity of products if you contact Dynex Customer Service. For further advice, please refer to our Counterfeit Goods notice on our web-site.