

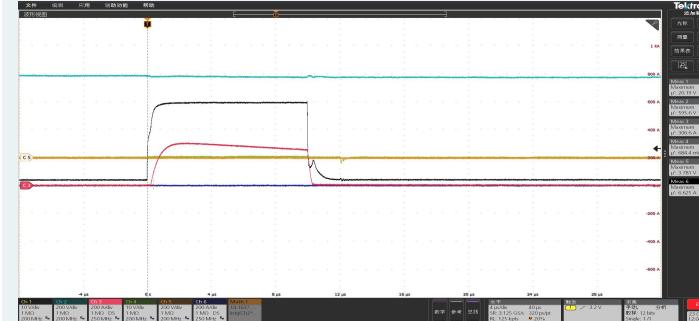
# TO-247-3L车规IGBT单管——给空调压缩机控制器装上“短路防护盾”



## 产品介绍

扬杰科技近日推出了新一代TO-247-3L封装1200V车规级IGBT单管，产品采用新一代微沟槽工艺平台，极大的优化了器件的导通损耗，具有较强的短路能力，产品参数一致性好，可靠性优良，适用于压缩机控制器等各类中低频应用领域。

1. 精细微沟槽工艺平台，极具性价比的芯片方案；
2. 电压等级为1200V，电流等级为40A@ $T_c=100^\circ\text{C}$ ；
3. 低导通损耗，适用于中低频应用领域；
4. 具有极强的短路能力(器件在20V的高驱动电压条件下依旧保证10us以上的短路能力)



如左图所示为器件在20V驱动电压条件下的一类短路实测波形

更多规格书详见官网

Product Name	$V_{CES}$ (V)	$I_c$ (A)	$V_{GE(th)}$ (V)	$V_{CE(sat)}$ (V)	$V_F$ (V)	$P_d$ (W)	$T_j$ ( $^\circ\text{C}$ )
DGW40N120CTL1ACQ	1200V	40A	5.8	1.65	2.1	320	-40~175



空调压缩机控制器

# Automotive-grade IGBT for Air Conditioning Compressor Controllers in New Energy Vehicles



## Product Introduction

Yangjie Technology recently launched a new generation of To-247-3L packaged 1200V automotive-grade discrete IGBT. The product adopts a new generation of micro-trench process platform, greatly optimizing the device's conduction loss, featuring strong short-circuit capability, good parameter consistency, and excellent reliability. It is suitable for various medium and low frequency applications such as compressor controllers.

## New Product Announcement

1. Micro-trench process platform, a highly cost-effective chip solution;
2. Voltage rating of 1200V, current rating of 40A@ $T_c=100^\circ\text{C}$ ;
3. Low conduction loss, suitable for medium to low frequency applications;
4. Strong short-circuit capability

(The device still ensures a short-circuit withstand time of over 10  $\mu\text{s}$  even under a high drive voltage of 20V)



As shown in the left figure, this is category one of short-circuit measured waveform of the device under a 20V drive voltage

Please refer to the official website for more products

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Air conditioning  
compressor controller

## Product Features

## Application