

**Trans IGBT Chip N-CH 600V 48A 300mW 3-Pin(3+Tab) TO-247**

Images are for reference only

[Inquiry](#)**Manufacturer:** [Littelfuse Inc](#)**Package/Case:** TO-247**Product Type:** Thyristors**Lifecycle:** Active**General Description**

GenX3™ IGBTs are PT (Punch Through) manufactured using our robust HDMOS IGBT process. 300V GenX3™ IGBTs offer switching capabilities up to 150 kHz, with currents ranging from 42A to 120A. The combination of high switching speeds and low conduction losses offers power designers a new high value option for switching applications. These UIS rated devices are rugged and robust making them comparable to most rugged power MOSFETs. 600V GenX3™ are optimized for high current applications requiring soft-switching frequencies upwards of 200 kHz and hard-switching frequencies of 40 kHz. These devices utilize our proven Punch-Through (PT) technology providing higher surge current capabilities, lower saturation voltage, and lower energy losses offering designers a new viable option for switching applications at the 600V range. 1200V GenX3™ utilize our advanced Punch-Through (PT) technology to provide lower saturation voltages, lower switching losses, and higher surge current capabilities. This growing product line aimed at the high voltage power conversion market. To accommodate optimum part selection, designers have a choice in selecting between three sub-classes denoted A3, B3, and C3. These classifications offer greater system design flexibility and the opportunity for designers to reach the best compromise between critical requirements such as switching frequency, efficiency, and cost.

## Key Features

High current handling capability  
International standard packages  
Optimized for low conduction & switching losses  
Ultra fast anti-parallel diode (optional)  
Avalanche rated  
Square RBSOA  
Low cost alternative to MOSFETs in the 300V range  
Drive simplicity with MOS Gate turn-on  
High frequency IGBT

## Application

Power inverters  
UPS  
Motor drives  
SMPS  
PFC circuits  
Battery chargers  
Welding machines  
Lamp ballast  
In-rush current protection circuits  
DC choppers  
Induction heating  
Solar system inverters  
Power Factor Correction Circuit  
Uninterrupted power supply  
Switch Mode power supply  
Motor controls (ACAC/DC Motors)  
Capacitive discharge switch

## Recommended For You

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### **IXGH48N60C3D1**

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TO-247

### **IXYX100N120C3**

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PLUS247

### **IXGH30N60B2D1**

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### **IXYN30N170CV1**

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N

### **IXBH16N170**

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### **IXGH60N60C2**

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**IXGH48N60A3**

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**IXGN320N60A3**

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MODULE

**IXGH60N60C3**

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**IXGP20N120A3**

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**IXYR50N120C3D1**

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ISOPLUS247

**IXYH50N65C3D1**

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**IXGP8N100**

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**IXTQ460P2**

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TO-3P

**IXGR48N60C3D1**

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