





# NGTB40N120FL2WG

|                          |   |
|--------------------------|---|
| Manufacturer Part Number | <b>NGTB40N120FL2WG</b>  |
| Manufacturer             | <b>onsemi</b>   |
| Allelco Part Number      | 32D-NGTB40N120FL2WG   |
| ECAD Model               |  PCB Symbol, Footprint & 3D Mode |
| Parts Description        | IGBT TRENCH/FS 1200V 80A TO247  |
| Package                  | TO-247-3  |
| Data sheet               | <b>NGTB40N120FL2WG.pdf</b>  |
| RoHS Status              |  ROHS3 Compliant                 |



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Request a quote for NGTB40N120FL2WG, please send us email: [info@allelco.com](mailto:info@allelco.com)



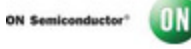
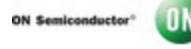
## Specifications

NGTB40N120FL2WG Tech Specifications  
NGTB40N120FL2WG - onsemi technical specifications, attributes, parameters

| Product Attribute                           | Attribute Value         | Product Attribute                | Attribute Value    |
|---|-------------------------|----------------------------------|--------------------|
| Manufacturer                                | onsemi                  | Package / Case                   | TO-247-3           |
| Voltage - Collector Emitter Breakdown (Max) | 1200 V                  | Package                          | Tube               |
| Vce(on) (Max) @ Vge, Ic                     | 2.4V @ 15V, 40A         | Operating Temperature            | -55°C ~ 175°C (TJ) |
| Test Condition                              | 600V, 40A, 100hm, 15V   | Mounting Type                    | Through Hole       |
| Td (on/off) @ 25°C                          | 116ns/286ns             | Input Type                       | Standard           |
| Switching Energy                            | 3.4mJ (on), 1.1mJ (off) | IGBT Type                        | Trench Field Stop  |
| Supplier Device Package                     | TO-247                  | Gate Charge                      | 313 nC             |
| Series                                      | -                       | Current - Collector Pulsed (Icm) | 200 A              |
| Reverse Recovery Time (trr)                 | 240 ns                  | Current - Collector (Ic) (Max)   | 80 A               |
| Power - Max                                 | 535 W                   | Base Product Number              | NGTB40             |

## Parts with Similar Specifications

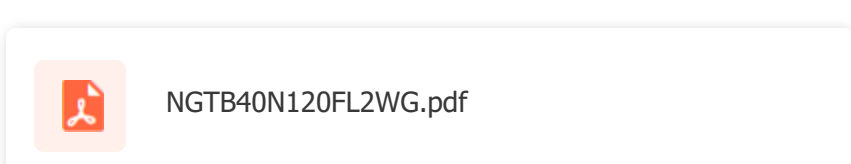
The three parts on the right have similar specifications to onsemi NGTB40N120FL2WG

| Product Attribute                           | <br>NO PICTURE |  |  |  |
|---|---|---|---|---|
| Part Number                                 | NGTB40N120FL2WG   | NGTB40N120L3WG  | NGTB40N135IHRWG   | NGTB30N135IHR1WG  |
| Manufacturer                                | onsemi  | onsemi  | onsemi  | onsemi  |
| Supplier Device Package                     | TO-247  | TO-247-3  | TO-247  | TO-247-3  |
| Reverse Recovery Time (trr)                 | 240 ns  | 86 ns   | -   | -   |
| Series                                      | -   | -   | -   | -   |
| Power - Max                                 | 535 W   | 454 W   | 394 W   | 394 W   |
| Package                                     | Tube  | Tube  | Tube  | Tube  |
| Vce(on) (Max) @ Vge, Ic                     | 2.4V @ 15V, 40A   | 2V @ 15V, 40A   | 2.7V @ 15V, 40A   | 3V @ 15V, 30A   |
| Td (on/off) @ 25°C                          | 116ns/286ns   | 18ns/150ns  | -/250ns   | -/200ns   |
| Operating Temperature                       | -55°C ~ 175°C (TJ)  | -55°C ~ 175°C (TJ)  | -40°C ~ 175°C (TJ)  | -40°C ~ 175°C (TJ)  |
| Voltage - Collector Emitter Breakdown (Max) | 1200 V  | 1200 V  | 1350 V  | 1350 V  |
| Base Product Number                         | NGTB40  | NGTB40  | NGTB40  | NGTB30  |
| Gate Charge                                 | 313 nC  | 220 nC  | 234 nC  | 220 nC  |
| Test Condition                              | 600V, 40A, 100hm, 15V   | 600V, 40A, 100hm, 15V   | 600V, 40A, 100hm, 15V   | 600V, 30A, 100hm, 15V   |
| Input Type                                  | Standard  | Standard  | Standard  | Standard  |
| Mounting Type                               | Through Hole  | Through Hole  | Through Hole  | Through Hole  |
| Current - Collector (Ic) (Max)              | 80 A  | 160 A   | 80 A  | 60 A  |
| Current - Collector Pulsed (Icm)            | 200 A   | 160 A   | 120 A   | 120 A   |
| Package / Case                              | TO-247-3  | TO-247-3  | TO-247-3  | TO-247-3  |
| IGBT Type                                   | Trench Field Stop   | Trench Field Stop   | Trench Field Stop   | Trench Field Stop   |
| Switching Energy                            | 3.4mJ (on), 1.1mJ (off)   | 1.5mJ (on), 1.5mJ (off)   | 1.3mJ (off)   | 630µA (off)   |

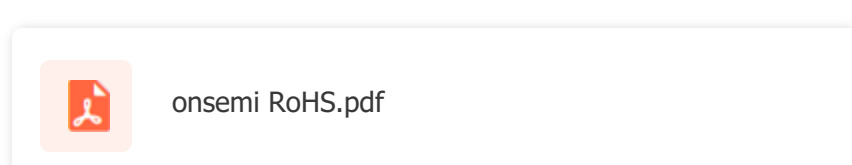
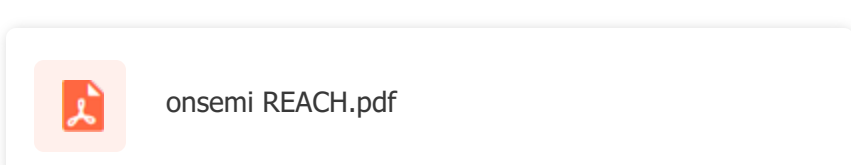
## NGTB40N120FL2WG Datasheet PDF

Download NGTB40N120FL2WG pdf datasheets and onsemi documentation for NGTB40N120FL2WG - onsemi.

### Datasheets



### Environmental Information



### PCN Assembly/Origin



















Assembly Change 24/Sep/2021.pdf

## PCN Design/Specification

Contact Mask Change 17/Dec/2020.pdf

## Customers Also Interested in

### Recommended Products

|  |   |  |   |  |  |
|--|---|--|---|--|--|
|  <b>NGTB40N60FL</b><br>AMI Semiconductor/onsemi                         |  <b>NGTB40N120L3WG</b><br>onsemi<br>IGBT 1200V 160A TO247  |  <b>NGTB30N60FLWG<br/>30N60FL</b><br>AMI Semiconductor/onsemi |  <b>NGTB40N135IHRWG</b><br>onsemi<br>IGBT TRENCH/FS 1350V 80A TO247 |  <b>NGTB30N135IHR1WG</b><br>onsemi<br>IGBT 1350V 30A TO247          |  <b>NGTB40N120FLWG</b><br>onsemi<br>IGBT 1200V 40A TO247            |
|  <b>NGTB40N60FL2WG</b><br>onsemi<br>INSULATED GATE BIPOLAR<br>TRANSISTO |  <b>NGTB30N135IHR</b><br>Fairchild (onsemi)                |  <b>NGTB30N140IHR3WG</b><br>AMI Semiconductor/onsemi          |  <b>NGTB30N60FWG</b><br>onsemi<br>IGBT 600V 60A 167W TO247          |  <b>NGTB30N60FLWG</b><br>onsemi<br>IGBT 600V 60A 250W TO247         |  <b>NGTB30N135IHRWG</b><br>onsemi<br>IGBT TRENCH/FS 1350V 60A TO247 |
|  <b>NGTB40N120FL3WG</b><br>onsemi<br>IGBT 1200V 160A TO247            |  <b>NGTB40N120SWG</b><br>onsemi<br>IGBT 40A 1200V TO-247 |  <b>NGTB30N60FL2G</b><br>AMI Semiconductor/onsemi           |  <b>NGTB40N120FL3</b><br>ALCORLINK                                |  <b>NGTB35N65FL2WG</b><br>onsemi<br>IGBT TRENCH/FS 650V 70A TO247 |  <b>NGTB35N60FL2WG</b><br>onsemi<br>IGBT TRENCH/FS 600V 70A TO247 |

## Shipment

### Delivery Time

In-stock items can be shipped within 24 hours. Some parts will be arranged for delivery within 1-2 days from the date all items arrive at our warehouse. And Allelco ships order once a day at about 17:00, except Sunday. Once the goods are shipped, the estimated delivery time depends on the shipping methods and Delivery destination. The table below shows are the logistic time for some common countries.

### Delivery Cost

- > Use your express account for shipment if you have one.
  - > Use our account for the shipment. Refer to the table below for the approximate charges.
- (Different time frame / countries / package size has different price.)

### Delivery Method

- > Global Common Shipment by DHL / UPS / FedEx / TNT / EMS / SF we support.
- > Others more shipping ways, please get in touch with your customer manager.

| Common Countries Logistic Time Reference |                |                    |
|--|----------------|--------------------|
| Region                                   | Country        | Logistic Time(Day) |
| America                                  | United States  | 5                  |
|  | Brazil         | 7                  |
| Europe                                   | Germany        | 5                  |
|  | United Kingdom | 4                  |
|  | Italy          | 5                  |
| Oceania                                  | Australia      | 6                  |
|  | New Zealand    | 7                  |
| Asia                                     | India          | 6                  |
|  | Japan          | 7                  |
| Middle East                              | Israel         | 6                  |

| DHL & FedEx Shipment Charges Reference |                      |
|--|----------------------|
| Shipment charges(KG)                   | Reference DHL(USD\$) |
| 0.00kg-1.00kg                          | USD\$60.00           |
| 1.00kg-2.00kg                          | USD\$70.00           |
| 2.00kg-3.00kg                          | USD\$80.00           |




Note: The above table is for reference only. There may have some data bias for the uncontrollable factors. Contact us if you have any questions.

## Payment Support

The payment method can be chosen from the methods shown below:  
Wire Transfer (T/T, Bank Transfer), Western Union, Credit card, PayPal.



## Your Faithful Supply Chain Partner -

|   |   |  |
|---|---|--|
|  Efficient Supply Management |  Cost-Saving Procurement |  Fast Sourcing & Delivery |
|---|---|--|

Contact us if you have any questions.

|   |   |
|---|---|
|  Phone<br>+00852 9146 4856 |  Email<br>info@allelco.com |
|---|---|

## Certifications & Memberships



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### Contact us

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