



Image may be representation.
See specifications for product details.



FDD86381-F085

| | |
|--------------------------|---------------------------------------|
| Manufacturer Part Number | FDD86381-F085 |
| Manufacturer | onsemi |
| Allelco Part Number | 32D-FDD86381-F085 |
| ECAD Model | Request Free CAD Models |
| Parts Description | MOSFET N-CH 80V 25A DPAK |
| Package | TO-252-3, DPak (2 Leads + Tab), SC-63 |
| Data sheet | FDD86381_F085 Datasheet.pdf |
| RoHs Status | ROHS3 Compliant |

[Get a Quote](#)

FDD86381-F085 - onsemi.New Original in Stock. Download Linear Technology FDD86381-F085 datasheet/specifications on AllelcoElec.com.
Request a quote for FDD86381-F085, please send us email: info@allelco.com

Specifications

FDD86381-F085 Tech Specifications

FDD86381-F085 - onsemi technical specifications, attributes, parameters

| Product Attribute | Attribute Value | Product Attribute | Attribute Value |
|-------------------------|---------------------------------------|--|--------------------|
| Manufacturer | onsemi | Operating Temperature | -55°C ~ 175°C (TJ) |
| Vgs(th) (Max) @ Id | 4V @ 250µA | Mounting Type | Surface Mount |
| Vgs (Max) | ±20V | Input Capacitance (Ciss) (Max) @ Vds | 866 pF @ 40 V |
| Technology | MOSFET (Metal Oxide) | Gate Charge (Qg) (Max) @ Vgs | 21 nC @ 10 V |
| Supplier Device Package | TO-252AA | FET Type | N-Channel |
| Series | Automotive, AEC-Q101, PowerTrench® | FET Feature | - |
| Rds On (Max) @ Id, Vgs | 21mOhm @ 25A, 10V | Drive Voltage (Max Rds On, Min Rds On) | 10V |
| Power Dissipation (Max) | 48.4W (Tj) | Drain to Source Voltage (Vdss) | 80 V |
| Package / Case | TO-252-3, DPak (2 Leads + Tab), SC-63 | Current - Continuous Drain (Id) @ 25°C | 25A (Tc) |
| Package | Tape & Reel (TR) | Base Product Number | FDD86381 |

Parts with Similar Specifications

The three parts on the right have similar specifications to onsemi FDD86381-F085

| Product Attribute | | | | |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Part Number | FDD86381-F085 | FDD86367 | FDD8647L | FDD86540 |
| Manufacturer | onsemi | onsemi | onsemi | onsemi |
| Drain to Source Voltage (Vdss) | 80 V | 80 V | 40 V | 60 V |
| Vgs(th) (Max) @ Id | 4V @ 250µA | 4V @ 250µA | 3V @ 250µA | 4V @ 250µA |
| Vgs (Max) | ±20V | ±20V | ±20V | ±20V |
| Technology | MOSFET (Metal Oxide) | MOSFET (Metal Oxide) | MOSFET (Metal Oxide) | MOSFET (Metal Oxide) |
| Rds On (Max) @ Id, Vgs | 21mOhm @ 25A, 10V | 4.2mOhm @ 80A, 10V | 9mOhm @ 13A, 10V | 4.1mOhm @ 21.5A, 10V |
| Supplier Device Package | TO-252AA | D-PAK (TO-252) | TO-252AA | TO-252AA |
| Series | Automotive, AEC-Q101, PowerTrench® | Automotive, AEC-Q101, PowerTrench® | PowerTrench® | PowerTrench® |
| Base Product Number | FDD86381 | FDD863 | FDD8647 | FDD865 |
| FET Type | N-Channel | N-Channel | N-Channel | N-Channel |
| Package | Tape & Reel (TR) | Tape & Reel (TR) | Tape & Reel (TR) | Tape & Reel (TR) |
| Gate Charge (Qg) (Max) @ Vgs | 21 nC @ 10 V | 88 nC @ 10 V | 28 nC @ 10 V | 90 nC @ 10 V |
| Power Dissipation (Max) | 48.4W (Tj) | 227W (Tj) | 3.1W (Ta), 43W (Tc) | 3.1W (Ta), 127W (Tc) |
| Mounting Type | Surface Mount | Surface Mount | Surface Mount | Surface Mount |
| FET Feature | - | - | - | - |
| Input Capacitance (Ciss) (Max) @ Vds | 866 pF @ 40 V | 4840 pF @ 40 V | 1640 pF @ 20 V | 6340 pF @ 30 V |
| Drive Voltage (Max Rds On, Min Rds On) | 10V | 10V | 4.5V, 10V | 8V, 10V |
| Operating Temperature | -55°C ~ 175°C (TJ) | -55°C ~ 175°C (TJ) | -55°C ~ 150°C (TJ) | -55°C ~ 150°C (TJ) |
| Package / Case | TO-252-3, DPak (2 Leads + Tab), SC-63 | TO-252-3, DPak (2 Leads + Tab), SC-63 | TO-252-3, DPak (2 Leads + Tab), SC-63 | TO-252-3, DPak (2 Leads + Tab), SC-63 |
| Current - Continuous Drain (Id) @ 25°C | 25A (Tc) | 100A (Tc) | 14A (Ta), 42A (Tc) | 21.5A (Ta), 50A (Tc) |

FDD86381-F085 Datasheet PDF

Download FDD86381-F085 pdf datasheets and onsemi documentation for FDD86381-F085 - onsemi.

Datasheets

[FDD86381_F085 Datasheet.pdf](#)

Environmental Information

[onsemi REACH.pdf](#)

[onsemi RoHS.pdf](#)

PCN Design/Specification

Logo 17/Aug/2017.pdf

PCN Packaging

Mult Devices 24/Oct/2017.pdf

PCN Part Number

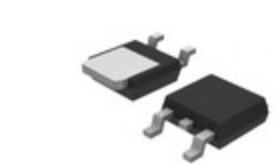
Mult Device Part Number Chg 30/May/2017.pdf

PCN Assembly/Origin

Mult Dev A/T 18/Aug/2021.pdf

Customers Also Interested in

Recommended Products



FDD86367

onsemi
MOSFET N-CH 80V 100A DPAK



FDD86569

Fairchild (onsemi)



FDD8647L

onsemi
MOSFET N-CH 40V 14A/42A DPAK



FDD86252 MOS

Fairchild (onsemi)



FDD86540

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MOSFET N-CH 60V 21.5A/50A DPAK



FDD86580-F085

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MOSFET N-CH 60V 50A DPAK



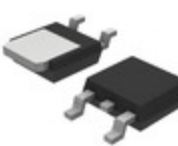
FDD86380-F085

onsemi
MOSFET N-CH 80V 50A DPAK



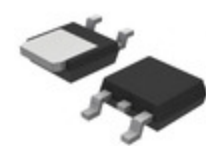
FDD86580

Fairchild (onsemi)



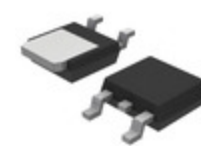
FDD86369-F085

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MOSFET N-CH 80V 90A DPAK



FDD86569-F085

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MOSFET N-CH 60V 90A DPAK



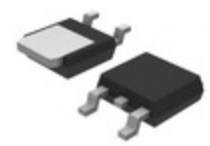
FDD86367-F085

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MOSFET N-CH 80V 100A DPAK



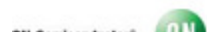
FDD86326

onsemi
MOSFET N-CH 80V 8A/37A DPAK



FDD86567-F085

onsemi
MOSFET N-CH 60V 100A DPAK



FDD86380

AMI Semiconductor/onsemi



FDD8647L MOS

Fairchild (onsemi)



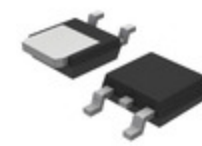
FDD8647L

Fairchild Semiconductor
POWER FIELD-EFFECT TRANSISTOR,
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FDD86567

Fairchild (onsemi)



FDD86369

onsemi
MOSFET N-CH 80V 90A DPAK

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
+00852 9146 4856
- Email
info@allelco.com

Certifications & Memberships



View More

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Email: info@Allelco.com

