

## $\checkmark$

# STH315N10F7-2

Manufacturer Part Number	STH315N10F7-2		
Manufacturer	STMicroelectronics		
Allelco Part Number	32D-STH315N10F7-2		
ECAD Model	PCB Symbol, Footprint & 3D Mode		
Parts Description	MOSFET N-CH 100V 180A H2PAK-2	life.augmented	Get a Quote
Package	TO-263-3, D <sup>2</sup> Pak (2 Leads + Tab), TO-263AB		
Data sheet	STH315N10F7-2,STH315N10F7-6.pdf		
RoHs Status	ROHS3 Compliant		

Request a quote for STH315N10F7-2, please send us email: info@allelco.com

## Specifications

#### STH315N10F7-2 Tech Specifications

STH315N10F7-2 - STMicroelectronics technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	STMicroelectronics	Operating Temperature	-55°C ~ 175°C (TJ)
Vgs(th) (Max) @ Id	4.5V @ 250µA	Mounting Type	Surface Mount
Vgs (Max)	±20V	Input Capacitance (Ciss) (Max) @ Vds	12800 pF @ 25 V
Technology	MOSFET (Metal Oxide)	Gate Charge (Qg) (Max) @ Vgs	180 nC @ 10 V
Supplier Device Package	H2Pak-2	FET Type	N-Channel
Series	Automotive, AEC-Q101, DeepGATE™, STripFET™ VII	FET Feature	-
Rds On (Max) @ Id, Vgs	2.3mOhm @ 60A, 10V	Drive Voltage (Max Rds On, Min Rds On)	10V
Power Dissipation (Max)	315W (Tc)	Drain to Source Voltage (Vdss)	100 V

Package / Case	TO-263-3, D <sup>2</sup> Pak (2 Leads + Tab), TO-263AB	Current - Continuous Drain (Id) @ 25°C	180A (Tc)
Package	Tape & Reel (TR)	Base Product Number	STH315

## **Parts with Similar Specifications**

The three parts on the right have similar specifications to STMicroelectronics STH315N10F7-2

Product Attribute	NO PICTURE		life.augmented	life.augmented
Part Number	STH315N10F7-2	STH310N10F7-6	STH320N4F6-2	STH270N8F7-2
Manufacturer	STMicroelectronics	STMicroelectronics	STMicroelectronics	STMicroelectronics
Operating Temperature	-55°C ~ 175°C (TJ)	-55°C ~ 175°C (TJ)	-55°C ~ 175°C (TJ)	-55°C ~ 175°C (TJ)
Gate Charge (Qg) (Max) @ Vgs	180 nC @ 10 V	180 nC @ 10 V	240 nC @ 10 V	193 nC @ 10 V
Series	Automotive, AEC-Q101, DeepGATE <sup>™</sup> , STripFET <sup>™</sup> VII	DeepGATE <sup>™</sup> , STripFET <sup>™</sup> VII	Automotive, AEC-Q101, DeepGATE <sup>™</sup> , STripFET <sup>™</sup> VI	DeepGATE™, STripFET™ VII
Base Product Number	STH315	STH310	STH320	STH270
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Vgs(th) (Max) @ Id	4.5V @ 250µA	3.8V @ 250µA	4V @ 250µA	4V @ 250µA
Technology	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)
Package / Case	TO-263-3, D <sup>2</sup> Pak (2 Leads + Tab), TO-263AB	TO-263-7, D <sup>2</sup> Pak (6 Leads + Tab)	TO-263-3, D <sup>2</sup> Pak (2 Leads + Tab) Variant	TO-263-3, D <sup>2</sup> Pak (2 Leads + Tab) Variant
Package	Tape & Reel (TR)	Tape & Reel (TR)	Tape & Reel (TR)	Tape & Reel (TR)
Current - Continuous Drain (Id) @ 25°C	180A (Tc)	180A (Tc)	200A (Tc)	180A (Tc)
Vgs (Max)	±20V	±20V	±20V	±20V
Input Capacitance (Ciss) (Max) @ Vds	12800 pF @ 25 V	12800 pF @ 25 V	13800 pF @ 15 V	13600 pF @ 50 V
Power Dissipation (Max)	315W (Tc)	315W (Tc)	300W (Tc)	315W (Tc)
FET Feature	-	-	-	-
Drain to Source Voltage (Vdss)	100 V	100 V	40 V	80 V
Drive Voltage (Max Rds On, Min Rds On)	10V	10V	10V	10V
Rds On (Max) @ Id, Vgs	2.3mOhm @ 60A, 10V	2.5mOhm @ 60A, 10V	1.3mOhm @ 80A, 10V	2.1mOhm @ 90A, 10V
<b>FET Туре</b>	N-Channel	N-Channel	N-Channel	N-Channel
Supplier Device Package	H2Pak-2	Н2РАК-6	H <sup>2</sup> PAK	H²PAK

## STH315N10F7-2 Datasheet PDF

Download STH315N10F7-2 pdf datasheets and STMicroelectronics documentation for STH315N10F7-2 - STMicroelectronics.

### Datasheets



PCN Packaging



Mult Dev Inner Box Chg 9/Dec/2021.pdf

### PCN Assembly/Origin



STy315 Wafer Chgs 10/Dec/2020.pdf

### PCN Design/Specification

SCTx/SCTx/STHx/STPSCx/STTHx/TN4050HP 26/Jul/2022.pdf

### **Customers Also Interested in**

### **Recommended Products**



STH310N10F7-6

STMicroelectronics MOSFET N-CH 100V 180A H2PAK-6



**STH33N20 STMicroelectronics** 



**STH320N4F6-2 MOS** STMicroelectronics

**NO PICTURE** 

STH36N60DM6 ST/TESLA

**STH2APUR STMicroelectronics** 

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STH320N4F6-2

STMicroelectronics MOSFET N-CH 40V 200A H2PAK



STH270N8F7-2

STMicroelectronics MOSFET N-CH 80V 180A H2PAK



STH315N10F7-6 STMicroelectronics MOSFET N-CH 100V 180A H2PAK-6



STH320N4F6-6 STMicroelectronics MOSFET N-CH 40V 200A H2PAK-6 life.augmented

STH310N10F7-2 STMicroelectronics MOSFET N-CH 100V 180A H2PAK-2 STH275N8F7-6AG

STMicroelectronics MOSFET N-CH 80V 180A H2PAK-6 STH2835-27-H-PJQF-B

**NO PICTURE** 

Shineon



STH320N4F6

STMicroelectronics



STH2835-30-H-Q0Q1-B Shineon



STH300NH02L-6

STMicroelectronics MOSFET N-CH 24V 180A H2PAK



**STH289A** STMicroelectronics STH360N4F6-2

life.augmented

STMicroelectronics MOSFET N-CH 40V 180A H2PAK-2



STH310N10F-2

STMicroelectronics





## 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	
America	Brazil	7	
	Germany	5	
Europe	United Kingdom	4	
	Italy	5	
Oceania	Australia	6	
Oceania	New Zealand	7	
Asia	India	6	
Азіа	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 -





### Certifications & Memberships





#### Contact us if you have any questions.







MPA

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