



Image may be representation.  
See specifications for product details.



## STD12NM50N

Manufacturer Part Number	<b>STD12NM50N</b>
Manufacturer	<b>STMicroelectronics</b>
Allelco Part Number	32D-STD12NM50N
ECAD Model	Request Free CAD Models
Parts Description	MOSFET N-CH 500V 11A DPAK
Package	TO-252-3, DPak (2 Leads + Tab), SC-63
Data sheet	<b>STx12NM50N.pdf</b>
RoHs Status	<b>ROHS3 Compliant</b>

**Get a Quote**

STD12NM50N - STMicroelectronics.New Original in Stock. Download Linear Technology STD12NM50N datasheet/specifications on AllelcoElec.com.  
Request a quote for STD12NM50N, please send us email: [info@allelco.com](mailto:info@allelco.com)

### Specifications

STD12NM50N Tech Specifications  
STD12NM50N - STMicroelectronics technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	STMicroelectronics	Operating Temperature	150°C (TJ)
Vgs(th) (Max) @ Id	4V @ 250µA	Mounting Type	Surface Mount
Vgs (Max)	±25V	Input Capacitance (Ciss) (Max) @ Vds	940 pF @ 50 V
Technology	MOSFET (Metal Oxide)	Gate Charge (Qg) (Max) @ Vgs	30 nC @ 10 V
Supplier Device Package	DPAK	FET Type	N-Channel
Series	MDmesh™ II	FET Feature	-
Rds On (Max) @ Id, Vgs	380mOhm @ 5.5A, 10V	Drive Voltage (Max Rds On, Min Rds On)	10V
Power Dissipation (Max)	100W (Tc)	Drain to Source Voltage (Vdss)	500 V
Package / Case	TO-252-3, DPak (2 Leads + Tab), SC-63	Current - Continuous Drain (Id) @ 25°C	11A (Tc)
Package	Tape & Reel (TR)	Base Product Number	STD12

### Parts with Similar Specifications

The three parts on the right have similar specifications to STMicroelectronics STD12NM50N

Product Attribute				
Part Number	STD12NM50N	STD12NF06T4	STD12NF06-1	STD12NM50ND
Manufacturer	STMicroelectronics	STMicroelectronics	STMicroelectronics	STMicroelectronics
Operating Temperature	150°C (TJ)	-55°C ~ 175°C (TJ)	-55°C ~ 175°C (TJ)	150°C (TJ)
FET Feature	-	-	-	-
FET Type	N-Channel	N-Channel	N-Channel	N-Channel
Vgs (Max)	±25V	±20V	±20V	±25V
Current - Continuous Drain (Id) @ 25°C	11A (Tc)	12A (Tc)	12A (Tc)	11A (Tc)
Series	MDmesh™ II	STripFET™ II	STripFET™ II	FDmesh™ II
Technology	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)	MOSFET (Metal Oxide)
Drive Voltage (Max Rds On, Min Rds On)	10V	10V	10V	10V
Input Capacitance (Ciss) (Max) @ Vds	940 pF @ 50 V	315 pF @ 25 V	315 pF @ 25 V	850 pF @ 50 V
Power Dissipation (Max)	100W (Tc)	30W (Tc)	30W (Tc)	100W (Tc)
Mounting Type	Surface Mount	Surface Mount	Through Hole	Surface Mount
Base Product Number	STD12	STD12	STD12	STD12
Package	Tape & Reel (TR)	Tape & Reel (TR)	Tube	Tape & Reel (TR)
Package / Case	TO-252-3, DPak (2 Leads + Tab), SC-63	TO-252-3, DPak (2 Leads + Tab), SC-63	TO-251-3 Short Leads, IPak, TO-251AA	TO-252-3, DPak (2 Leads + Tab), SC-63
Gate Charge (Qg) (Max) @ Vgs	30 nC @ 10 V	12 nC @ 10 V	12 nC @ 10 V	30 nC @ 10 V
Rds On (Max) @ Id, Vgs	380mOhm @ 5.5A, 10V	100mOhm @ 6A, 10V	100mOhm @ 6A, 10V	380mOhm @ 5.5A, 10V
Drain to Source Voltage (Vdss)	500 V	60 V	60 V	500 V
Vgs(th) (Max) @ Id	4V @ 250µA	4V @ 250µA	4V @ 250µA	5V @ 250µA
Supplier Device Package	DPAK	DPAK	I-PAK	DPAK

### STD12NM50N Datasheet PDF

Download STD12NM50N pdf datasheets and STMicroelectronics documentation for STD12NM50N - STMicroelectronics.

#### Datasheets

STx12NM50N.pdf

### Customers Also Interested in

#### Recommended Products



**STD12NF06T4**

STMicroelectronics  
MOSFET N-CH 60V 12A DPAK

**STD12NF06L MOS**

STMicroelectronics



NO PICTURE

**STD13003 MOS**

AUK



NO PICTURE

**STD13005F**



**STD12NF06-1**

STMicroelectronics  
MOSFET N-CH 60V 12A IPAK



**STD12NF06LT4 MOS**

STMicroelectronics



**STD13003T4**

STMicroelectronics  
TRANS NPN 400V 1.5A DPAK



**STD12NM50ND**

STMicroelectronics  
MOSFET N-CH 500V 11A DPAK



**STD12NM65M2**

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NO PICTURE

**STD13005I**

AUK



**STD12NE06T4**

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**STD12NF06**

STMicroelectronics



**STD12NF06L-1**

STMicroelectronics  
MOSFET N-CH 60V 12A IPAK



**STD12NF06T4 MOS**

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**STD13005FB**

AUK



**STD13003A**

STMicroelectronics



**STD12NF06LT4**

STMicroelectronics  
MOSFET N-CH 60V 12A DPAK



**STD12NF06L**

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
	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 -



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Management



Cost-Saving  
Procurement



Fast Sourcing &  
Delivery

Contact us if you have any questions.



Phone  
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