



### STW12NK90Z Information



For Reference Only

Part Number STW12NK90Z

Manufacturer STMicroelectronics

Category Discrete Semiconductor Products

Transistors - FETs, MOSFETs - Single

**Description** MOSFET N-CH 900V 11A TO-247

Package TO-247-3

For the pricing/inventory/lead time, please contact

us

Website: https://www.heisener.com E-mail: salesdept@heisener.com



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## STW12NK90Z Specifications

Manufacturer Part Number         STW12NK90Z           Manufacturer         STMicroelectronics           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-247-3           Series         SuperMESH?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         11A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4.5V @ 100µA           Gate Charge (Qg) (Max) @ Vgs         152nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         3500pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         230W (Tc)           Rds On (Max) @ Id, Vgs         880 mOhm @ 5.5A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-247-3           Package / Case         TO-247-3           Report errors?		
Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-247-3           Series         SuperMESH?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         11A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4.5V @ 100μA           Gate Charge (Qg) (Max) @ Vgs         152nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         3500pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         230W (Tc)           Rds On (Max) @ Id, Vgs         880 mOhm @ 5.5A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-247-3           Package / Case         TO-247-3	Manufacturer Part Number	STW12NK90Z
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FET Type N-Channel  Technology MOSFET (Metal Oxide)  Prain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C 11A (Tc)  Drive Voltage (Max Rds On, Min Rds On) Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs 152nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds Vgs (Max)  FET Feature - Power Dissipation (Max) Rds On (Max) @ Id, Vgs 880 mOhm @ 5.5A, 10V  Operating Temperature Mounting Type Supplier Device Package TO-247-3  Package / Case  N-Channel  MOSFET (Metal Oxide)  MOSFET (Metal Oxide)  900V  11A (Tc)  11A (Tc)  11A (Tc)  11A (Tc)  11A (Tc)  11A (Tc)  12V  4.5V @ 100µA  4.5V @ 100µA	Package	TO-247-3
Technology Drain to Source Voltage (Vdss) Current - Continuous Drain (Id) @ 25°C 11A (Tc) Drive Voltage (Max Rds On, Min Rds On) Vgs(th) (Max) @ Id Gate Charge (Qg) (Max) @ Vgs 152nC @ 10V Input Capacitance (Ciss) (Max) @ Vds Vgs (Max)  FET Feature - Power Dissipation (Max) Rds On (Max) @ Id, Vgs 880 mOhm @ 5.5A, 10V Operating Temperature -55°C ~ 150°C (TJ) Mounting Type Supplier Device Package TO-247-3 Package / Case TO-247-3 Package / Case	Series	SuperMESH?
Drain to Source Voltage (Vdss)900VCurrent - Continuous Drain (Id) @ 25°C11A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4.5V @ 100μAGate Charge (Qg) (Max) @ Vgs152nC @ 10VInput Capacitance (Ciss) (Max) @ Vds3500pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)230W (Tc)Rds On (Max) @ Id, Vgs880 mOhm @ 5.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-247-3Package / CaseTO-247-3	FET Type	N-Channel
Current - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  880 mOhm @ 5.5A, 10V  Operating Temperature  Supplier Device Package  Package / Case  11A (Tc)  10V  4.5V @ 100μA  3500pF @ 25V  25V  25V  25V  25V  25V  25V  25V	Technology	MOSFET (Metal Oxide)
Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4.5V @ 100μAGate Charge (Qg) (Max) @ Vgs152nC @ 10VInput Capacitance (Ciss) (Max) @ Vds3500pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)230W (Tc)Rds On (Max) @ Id, Vgs880 mOhm @ 5.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-247-3Package / CaseTO-247-3	Drain to Source Voltage (Vdss)	900V
Vgs(th) (Max) @ Id       4.5V @ 100μA         Gate Charge (Qg) (Max) @ Vgs       152nC @ 10V         Input Capacitance (Ciss) (Max) @ Vds       3500pF @ 25V         Vgs (Max)       ±30V         FET Feature       -         Power Dissipation (Max)       230W (Tc)         Rds On (Max) @ Id, Vgs       880 mOhm @ 5.5A, 10V         Operating Temperature       -55°C ~ 150°C (TJ)         Mounting Type       Through Hole         Supplier Device Package       TO-247-3         Package / Case       TO-247-3	Current - Continuous Drain (Id) @ 25°C	11A (Tc)
Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Supplier Device Package  Package / Case  152nC @ 10V  3500pF @ 25V  ±30V  230W  TC)  880 mOhm @ 5.5A, 10V  -55°C ~ 150°C (TJ)  Through Hole  TO-247-3	Drive Voltage (Max Rds On, Min Rds On)	10V
Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  ET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Separature  230W (Tc)  880 mOhm @ 5.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-247-3  Package / Case  TO-247-3	Vgs(th) (Max) @ Id	4.5V @ 100μA
Vgs (Max)±30VFET Feature-Power Dissipation (Max)230W (Tc)Rds On (Max) @ Id, Vgs880 mOhm @ 5.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-247-3Package / CaseTO-247-3	Gate Charge (Qg) (Max) @ Vgs	152nC @ 10V
FET Feature - Case - Case - Case - TO-247-3	Input Capacitance (Ciss) (Max) @ Vds	3500pF @ 25V
Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  880 mOhm @ 5.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-247-3  Package / Case  TO-247-3	Vgs (Max)	±30V
Rds On (Max) @ Id, Vgs 880 mOhm @ 5.5A, 10V  Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Through Hole  Supplier Device Package TO-247-3  Package / Case TO-247-3	FET Feature	-
Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Through Hole  Supplier Device Package TO-247-3  Package / Case TO-247-3	Power Dissipation (Max)	230W (Tc)
Mounting Type Through Hole Supplier Device Package TO-247-3 Package / Case TO-247-3	Rds On (Max) @ Id, Vgs	880 mOhm @ 5.5A, 10V
Supplier Device Package TO-247-3 Package / Case TO-247-3	Operating Temperature	-55°C ~ 150°C (TJ)
Package / Case TO-247-3	Mounting Type	Through Hole
	Supplier Device Package	TO-247-3
Report errors?	Package / Case	TO-247-3
		Report errors?

#### STW12NK90Z Guarantees



### **Quality Guarantees**

We provide 90 days warranty. \*

If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.



#### **Service Guarantees**

We guarantee 100% customer satisfaction.

Our experienced sales team and tech support team back our services to satisfy all our customers.

## STW12NK90Z Payment Methods





















### STW12NK90Z Shipping Methods













If you have any question about STW12NK90Z, please do not hesitate to contact us!

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