



# **FQP5N90 Information**



For Reference Only

Part Number FQP5N90

ManufacturerFairchild/ON SemiconductorCategoryDiscrete Semiconductor Products<br/>Transistors - FETs, MOSFETs - Single

**Description** MOSFET N-CH 900V 5.4A TO-220

Package TO-220-3

For the pricing/inventory/lead time, please contact

us

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



Request a Quote

# **Certified Quality**

Heisener's commitment to quality has shaped our processes for sourcing, testing, shipping, and every step in between. This foundation underlies each component we sell.









# **FQP5N90 Specifications**

Manufacturer Part Number         FQP5N90           Manufacturer         Fairchild/ON Semiconductor           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-220-3           Series         QFET?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3		
Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-220-3           Series         QFET?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3	Manufacturer Part Number	FQP5N90
Package         TO-220-3           Series         QFET?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3	Manufacturer	Fairchild/ON Semiconductor
Package         TO-220-3           Series         QFET?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3	Category	Discrete Semiconductor Products
Series         QFET?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3		Transistors - FETs, MOSFETs - Single
FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         900V           Current - Continuous Drain (Id) @ 25°C         5.4A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         5V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         40nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1550pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         158W (Tc)           Rds On (Max) @ Id, Vgs         2.3 Ohm @ 2.7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220-3           Package / Case         TO-220-3	Package	TO-220-3
TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)900VCurrent - Continuous Drain (Id) @ 25°C5.4A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id5V @ 250μAGate Charge (Qg) (Max) @ Vgs40nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1550pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)158W (Tc)Rds On (Max) @ Id, Vgs2.3 Ohm @ 2.7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220-3Package / CaseTO-220-3	Series	QFET?
Drain to Source Voltage (Vdss)900VCurrent - Continuous Drain (Id) @ 25°C5.4A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id5V @ 250μAGate Charge (Qg) (Max) @ Vgs40nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1550pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)158W (Tc)Rds On (Max) @ Id, Vgs2.3 Ohm @ 2.7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220-3Package / CaseTO-220-3	FET Type	N-Channel
Current - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  St Q 250μA  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Case On (Max) @ Id, Vgs  Derating Temperature  Supplier Device Package  Package / Case  5.4A (Tc)  6.4  6.4  6.4  6.4  6.4  6.4  6.4  6.	Technology	MOSFET (Metal Oxide)
Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id5V @ 250μAGate Charge (Qg) (Max) @ Vgs40nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1550pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)158W (Tc)Rds On (Max) @ Id, Vgs2.3 Ohm @ 2.7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220-3Package / CaseTO-220-3	Drain to Source Voltage (Vdss)	900V
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  Operating Temperature  Supplier Device Package  Package / Case  SV @ 250μA  40nC @ 10V  1550pF @ 25V  ±30V  FET Seature  -  2.3 Ohm @ 2.7A, 10V  -55°C ~ 150°C (TJ)  Through Hole  TO-220-3  TO-220-3	Current - Continuous Drain (Id) @ 25°C	5.4A (Tc)
Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  1550pF @ 25V  Vgs (Max)  ±30V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  2.3 Ohm @ 2.7A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220-3  Package / Case  TO-220-3	Drive Voltage (Max Rds On, Min Rds On)	10V
Input Capacitance (Ciss) (Max) @ Vds  1550pF @ 25V  Vgs (Max)  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  2.3 Ohm @ 2.7A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220-3  Package / Case  TO-220-3	Vgs(th) (Max) @ Id	5V @ 250μA
Vgs (Max) ±30V  FET Feature -  Power Dissipation (Max) 158W (Tc)  Rds On (Max) @ Id, Vgs 2.3 Ohm @ 2.7A, 10V  Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Through Hole  Supplier Device Package TO-220-3  Package / Case TO-220-3	Gate Charge (Qg) (Max) @ Vgs	40nC @ 10V
FET Feature - Testure - Te	Input Capacitance (Ciss) (Max) @ Vds	1550pF @ 25V
Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  2.3 Ohm @ 2.7A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220-3  Package / Case  TO-220-3	Vgs (Max)	±30V
Rds On (Max) @ Id, Vgs2.3 Ohm @ 2.7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220-3Package / CaseTO-220-3	FET Feature	-
Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220-3  Package / Case  TO-220-3	Power Dissipation (Max)	158W (Tc)
Mounting Type Through Hole Supplier Device Package TO-220-3 Package / Case TO-220-3	Rds On (Max) @ Id, Vgs	2.3 Ohm @ 2.7A, 10V
Supplier Device Package TO-220-3 Package / Case TO-220-3	Operating Temperature	-55°C ~ 150°C (TJ)
Package / Case TO-220-3	Mounting Type	Through Hole
	Supplier Device Package	TO-220-3
Report errors?	Package / Case	TO-220-3
		Report errors?

### **FQP5N90** 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.

### **FQP5N90 Payment Methods**



















### **FQP5N90 Shipping Methods**













If you have any question about FQP5N90, please do not hesitate to contact us!

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