



### IRFS644BYDTU\_AS001 Information



For Reference Only

Part Number IRFS644BYDTU\_AS001

Manufacturer Fairchild/ON Semiconductor

Category Discrete Semiconductor Products
Transistors - FETs, MOSFETs - Single

Description MOSFET N-CH 250V 14A TO-220F

Package TO-220-3 Full Pack

For the pricing/inventory/lead time, please contact

us

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



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## IRFS644BYDTU\_AS001 Specifications

| Manufacturer Part Number         IRF8644BYDTU_AS001           Manufacturer         Fairchild/ON Semiconductor           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-220-3 Full Pack           Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         250V           Current - Continuous Drain (Id) @ 25°C         14A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         60nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1600pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         43W (Tc)           Rds On (Max) @ Id, Vgs         280 mOhm @ 7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220F-3           Package / Case         TO-220-3 Full Pack  |  |                                      |
|--|--|--------------------------------------|
| Category  Discrete Semiconductor Products  Transistors - FETs, MOSFETs - Single  Package  TO-220-3 Full Pack  Series  - FET Type  N-Channel  Technology  MOSFET (Metal Oxide)  Drain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C  14A (Tc)  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  60nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds  1600pF @ 25V  Vgs (Max)  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  280 mOhm @ 7A, 10V  Operating Temperature  Mounting Type  Through Hole  Supplier Device Package  Package / Case  TO-220-3 Full Pack  | Manufacturer Part Number               | IRFS644BYDTU_AS001                   |
| Package         TO-220-3 Full Pack           Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         250V           Current - Continuous Drain (Id) @ 25°C         14A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         60nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1600pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         43W (Tc)           Rds On (Max) @ Id, Vgs         280 mOhm @ 7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220F-3           Package / Case         TO-220-3 Full Pack  | Manufacturer                           | Fairchild/ON Semiconductor           |
| Package         TO-220-3 Full Pack           Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         250V           Current - Continuous Drain (Id) @ 25°C         14A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         60nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1600pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         43W (Tc)           Rds On (Max) @ Id, Vgs         280 mOhm @ 7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220F-3           Package / Case         TO-220-3 Full Pack  | Category                               | Discrete Semiconductor Products      |
| Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         250V           Current - Continuous Drain (Id) @ 25°C         14A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         4V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         60nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         1600pF @ 25V           Vgs (Max)         ±30V           FET Feature         -           Power Dissipation (Max)         43W (Tc)           Rds On (Max) @ Id, Vgs         280 mOhm @ 7A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220F-3           Package / Case         TO-220-3 Full Pack   |  | Transistors - FETs, MOSFETs - Single |
| FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)250VCurrent - Continuous Drain (Id) @ 25°C14A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4V @ 250μAGate Charge (Qg) (Max) @ Vgs60nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1600pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack   | Package                                | TO-220-3 Full Pack                   |
| TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)250VCurrent - Continuous Drain (Id) @ 25°C14A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4V @ 250μAGate Charge (Qg) (Max) @ Vgs60nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1600pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack  | Series                                 | -                                    |
| Drain to Source Voltage (Vdss)250VCurrent - Continuous Drain (Id) @ 25°C14A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4V @ 250μAGate Charge (Qg) (Max) @ Vgs60nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1600pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack  | FET Type                               | N-Channel                            |
| Current - Continuous Drain (Id) @ 25°C14A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4V @ 250μAGate Charge (Qg) (Max) @ Vgs60nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1600pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack  | Technology                             | MOSFET (Metal Oxide)                 |
| Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id4V @ 250μAGate Charge (Qg) (Max) @ Vgs60nC @ 10VInput Capacitance (Ciss) (Max) @ Vds1600pF @ 25VVgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack  | Drain to Source Voltage (Vdss)         | 250V                                 |
| Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220F-3  Package / Case  TO-220-3 Full Pack  | Current - Continuous Drain (Id) @ 25°C | 14A (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  Jemperature  Jemperatur | 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  280 mOhm @ 7A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220F-3  Package / Case  TO-220-3 Full Pack   | Vgs(th) (Max) @ Id                     | 4V @ 250μA                           |
| Vgs (Max)±30VFET Feature-Power Dissipation (Max)43W (Tc)Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack   | Gate Charge (Qg) (Max) @ Vgs           | 60nC @ 10V                           |
| FET Feature -  Power Dissipation (Max) 43W (Tc)  Rds On (Max) @ Id, Vgs 280 mOhm @ 7A, 10V  Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Through Hole  Supplier Device Package TO-220F-3  Package / Case TO-220-3 Full Pack   | Input Capacitance (Ciss) (Max) @ Vds   | 1600pF @ 25V                         |
| Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  280 mOhm @ 7A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220F-3  Package / Case  TO-220-3 Full Pack  | Vgs (Max)                              | ±30V                                 |
| Rds On (Max) @ Id, Vgs280 mOhm @ 7A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220F-3Package / CaseTO-220-3 Full Pack   | FET Feature                            | -                                    |
| Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220F-3  Package / Case  TO-220-3 Full Pack   | Power Dissipation (Max)                | 43W (Tc)                             |
| Mounting Type Through Hole Supplier Device Package TO-220F-3 Package / Case TO-220-3 Full Pack   | Rds On (Max) @ Id, Vgs                 | 280 mOhm @ 7A, 10V                   |
| Supplier Device Package TO-220F-3 Package / Case TO-220-3 Full Pack  | Operating Temperature                  | -55°C ~ 150°C (TJ)                   |
| Package / Case TO-220-3 Full Pack  | Mounting Type                          | Through Hole                         |
|  | Supplier Device Package                | TO-220F-3                            |
| Report errors?   | Package / Case                         | TO-220-3 Full Pack                   |
|  |  | Report errors?                       |

## IRFS644BYDTU\_AS001 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.

### IRFS644BYDTU\_AS001 Payment Methods



















### IRFS644BYDTU\_AS001 Shipping Methods













If you have any question about IRFS644BYDTU\_AS001, please do not hesitate to contact us!

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