

#### **FDC8886 Information**



For Reference Only

Part Number FDC8886

ManufacturerFairchild/ON SemiconductorCategoryDiscrete Semiconductor ProductsTransistors - FETs, MOSFETs - Single

**Description** MOSFET N-CH 30V 6.5A 6-SSOT

Package SOT-23-6 Thin, TSOT-23-6

For the pricing/inventory/lead time, please contact

us

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



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## **FDC8886 Specifications**

| Manufacturer Part Number         FDC8886           Manufacturer         Fairchild/ON Semiconductor           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         SOT-23-6 Thin, TSOT-23-6           Series         PowerTrench?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         6.5A (Ta), 8A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         7.4nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         465pF @ 15V           Vgs (Max)         ±25P @ 15V           Vgs (Max)         2.5P @ 250µA           FET Feature         -           Power Dissipation (Max)         1.6W (Ta)           Rds On (Max) @ Id, Vgs         23 mOhm @ 6.5A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         6-SSOT           Package / Case         SOT-23-6 Thin, TSOT-23-6  |  |                                      |
|--|--|--------------------------------------|
| Category  Discrete Semiconductor Products Transistors - FETs, MOSFETs - Single  SOT-23-6 Thin, TSOT-23-6  Series  PowerTrench?  FET Type  N-Channel  Technology  MOSFET (Metal Oxide)  Drain to Source Voltage (Vdss)  Ourrent - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Type  A65pF @ 15V  Vgs (Max)  ET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  A50r — Surface Mount  Mounting Type  Surface Mount  Surface Mount  Surface A Thin, TSOT-23-6  SOT-23-6 Thin, TSOT-23-6  | Manufacturer Part Number               | FDC8886                              |
| Package         SOT-23-6 Thin, TSOT-23-6           Series         PowerTrench?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         6.5A (Ta), 8A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         7.4nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         465pF @ 15V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         1.6W (Ta)           Rds On (Max) @ Id, Vgs         23 mOhm @ 6.5A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         6-SSOT           Package / Case         SOT-23-6 Thin, TSOT-23-6  | Manufacturer                           | Fairchild/ON Semiconductor           |
| PackageSOT-23-6 Thin, TSOT-23-6SeriesPowerTrench?FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C6.5A (Ta), 8A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs7.4nC @ 10VInput Capacitance (Ciss) (Max) @ Vds465pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)1.6W (Ta)Rds On (Max) @ Id, Vgs23 mOhm @ 6.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6   | Category                               | Discrete Semiconductor Products      |
| Series         PowerTrench?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         6.5A (Ta), 8A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         7.4nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         465pF @ 15V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         1.6W (Ta)           Rds On (Max) @ Id, Vgs         23 mOhm @ 6.5A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         6-SSOT           Package / Case         SOT-23-6 Thin, TSOT-23-6   |  | Transistors - FETs, MOSFETs - Single |
| FET Type N-Channel Technology MOSFET (Metal Oxide) Drain to Source Voltage (Vdss) 30V Current - Continuous Drain (Id) @ 25°C 6.5A (Ta), 8A (Tc) Drive Voltage (Max Rds On, Min Rds On) Vgs(th) (Max) @ Id 3V @ 250µA Gate Charge (Qg) (Max) @ Vgs 7.4nC @ 10V Input Capacitance (Ciss) (Max) @ Vds 465pF @ 15V Vgs (Max) £20V FET Feature - Power Dissipation (Max) Rds On (Max) @ Id, Vgs 23 mOhm @ 6.5A, 10V Operating Temperature -55°C ~ 150°C (TJ) Mounting Type Surface Mount Supplier Device Package 6-SSOT Package / Case SOT-23-6 Thin, TSOT-23-6   | Package                                | SOT-23-6 Thin, TSOT-23-6             |
| TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C6.5A (Ta), 8A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs7.4nC @ 10VInput Capacitance (Ciss) (Max) @ Vds465pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)1.6W (Ta)Rds On (Max) @ Id, Vgs23 mOhm @ 6.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6   | Series                                 | PowerTrench?                         |
| Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C6.5A (Ta), 8A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs7.4nC @ 10VInput Capacitance (Ciss) (Max) @ Vds465pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)1.6W (Ta)Rds On (Max) @ Id, Vgs23 mOhm @ 6.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6   | 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  7.4nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  23 mOhm @ 6.5A, 10V  Operating Temperature  Supplier Device Package  Package / Case  6.5A (Ta), 8A (Tc)  6.5A (T | Technology                             | MOSFET (Metal Oxide)                 |
| Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  3V @ 250μA  Gate Charge (Qg) (Max) @ Vgs  7.4nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  ±20V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  23 mOhm @ 6.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  6-SSOT  Package / Case  SOT-23-6 Thin, TSOT-23-6  | Drain to Source Voltage (Vdss)         | 30V                                  |
| Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  7.4nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds  465pF @ 15V  Vgs (Max)  ±20V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  23 mOhm @ 6.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  SOT-23-6 Thin, TSOT-23-6   | Current - Continuous Drain (Id) @ 25°C | 6.5A (Ta), 8A (Tc)                   |
| Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  465pF @ 15V  Vgs (Max)  ±20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  23 mOhm @ 6.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  6-SSOT  Package / Case  SOT-23-6 Thin, TSOT-23-6  | Drive Voltage (Max Rds On, Min Rds On) | 4.5V, 10V                            |
| Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  ET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  SOT-23-6 Thin, TSOT-23-6   | Vgs(th) (Max) @ Id                     | 3V @ 250μA                           |
| Vgs (Max)±20VFET Feature-Power Dissipation (Max)1.6W (Ta)Rds On (Max) @ Id, Vgs23 mOhm @ 6.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6   | Gate Charge (Qg) (Max) @ Vgs           | 7.4nC @ 10V                          |
| FET Feature -  Power Dissipation (Max) 1.6W (Ta)  Rds On (Max) @ Id, Vgs 23 mOhm @ 6.5A, 10V  Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Surface Mount  Supplier Device Package 6-SSOT  Package / Case SOT-23-6 Thin, TSOT-23-6   | Input Capacitance (Ciss) (Max) @ Vds   | 465pF @ 15V                          |
| Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  23 mOhm @ 6.5A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  6-SSOT  Package / Case  SOT-23-6 Thin, TSOT-23-6   | Vgs (Max)                              | ±20V                                 |
| Rds On (Max) @ Id, Vgs23 mOhm @ 6.5A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6  | FET Feature                            | -                                    |
| Operating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device Package6-SSOTPackage / CaseSOT-23-6 Thin, TSOT-23-6   | Power Dissipation (Max)                | 1.6W (Ta)                            |
| Mounting Type Surface Mount Supplier Device Package 6-SSOT Package / Case SOT-23-6 Thin, TSOT-23-6   | Rds On (Max) @ Id, Vgs                 | 23 mOhm @ 6.5A, 10V                  |
| Supplier Device Package 6-SSOT Package / Case SOT-23-6 Thin, TSOT-23-6   | Operating Temperature                  | -55°C ~ 150°C (TJ)                   |
| Package / Case SOT-23-6 Thin, TSOT-23-6  | Mounting Type                          | Surface Mount                        |
|  | Supplier Device Package                | 6-SSOT                               |
| Report errors?   | Package / Case                         | SOT-23-6 Thin, TSOT-23-6             |
|  |  | Report errors?                       |

#### FDC8886 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.

### **FDC8886 Payment Methods**



















### **FDC8886 Shipping Methods**













If you have any question about FDC8886, please do not hesitate to contact us!

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