



### **RSH125N03TB1 Information**



For Reference Only

Part Number RSH125N03TB1

Manufacturer Rohm Semiconductor

Category Discrete Semiconductor Products

Transistors - FETs, MOSFETs - Single

**Description**MOSFET N-CH 30V 12.5A SOP8**Package**8-SOIC (0.154", 3.90mm Width)

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.









## **RSH125N03TB1 Specifications**

| Manufacturer Part Number         RSH125N03TB1           Manufacturer         Rohm Semiconductor           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         8-SOIC (0.154", 3.90mm Width)           Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         12.5A (Ta)           Drive Voltage (Max Rds On, Min Rds On)         4V, 10V           Vgs(th) (Max) @ Id         2.5V @ 1mA           Gate Charge (Qg) (Max) @ Vgs         28nC @ 5V           Input Capacitance (Ciss) (Max) @ Vds         1670pF @ 10V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         2W (Ta)           Rds On (Max) @ Id, Vgs         9.1 mOhm @ 12.5A, 10V           Operating Temperature         -           Mounting Type         Surface Mount           Supplier Device Package         8-SOP           Package / Case         8-SOIC (0.154", 3.90mm Width)  |  |                                      |
|--|--|--------------------------------------|
| CategoryDiscrete Semiconductor ProductsTransistors - FETs, MOSFETs - SinglePackage8-SOIC (0.154", 3.90mm Width)Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C12.5A (Ta)Drive Voltage (Max Rds On, Min Rds On)4V, 10VVgs(th) (Max) @ Id2.5V @ 1mAGate Charge (Qg) (Max) @ Vgs28nC @ 5VInput Capacitance (Ciss) (Max) @ Vds1670pF @ 10VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs9.1 mOhm @ 12.5A, 10VOperating Temperature-Mounting TypeSurface MountSupplier Device Package8-SOPPackage / Case8-SOIC (0.154", 3.90mm Width)  | Manufacturer Part Number               | RSH125N03TB1                         |
| Package         8-SOIC (0.154", 3.90mm Width)           Series         -           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         12.5A (Ta)           Drive Voltage (Max Rds On, Min Rds On)         4V, 10V           Vgs(th) (Max) @ Id         2.5V @ 1mA           Gate Charge (Qg) (Max) @ Vgs         28nC @ 5V           Input Capacitance (Ciss) (Max) @ Vds         1670pF @ 10V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         2W (Ta)           Rds On (Max) @ Id, Vgs         9.1 mOhm @ 12.5A, 10V           Operating Temperature         -           Mounting Type         Surface Mount           Supplier Device Package         8-SOP           Package / Case         8-SOIC (0.154", 3.90mm Width)  | Manufacturer                           | Rohm Semiconductor                   |
| Package8-SOIC (0.154", 3.90mm Width)Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C12.5A (Ta)Drive Voltage (Max Rds On, Min Rds On)4V, 10VVgs(th) (Max) @ Id2.5V @ 1mAGate Charge (Qg) (Max) @ Vgs28nC @ 5VInput Capacitance (Ciss) (Max) @ Vds1670pF @ 10VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs9.1 mOhm @ 12.5A, 10VOperating Temperature-Mounting TypeSurface MountSupplier Device Package8-SOPPackage / Case8-SOIC (0.154", 3.90mm Width)   | Category                               | Discrete Semiconductor Products      |
| Series - M-Channel  FET Type N-Channel  Technology MOSFET (Metal Oxide)  Jorain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C 12.5A (Ta)  Drive Voltage (Max Rds On, Min Rds On) 4V, 10V  Vgs(th) (Max) @ Id 2.5V @ 1mA  Gate Charge (Qg) (Max) @ Vgs 28nC @ 5V  Input Capacitance (Ciss) (Max) @ Vds 1670pF @ 10V  Vgs (Max) ±20V  FET Feature - Power Dissipation (Max) 2W (Ta)  Rds On (Max) @ Id, Vgs 9.1 mOhm @ 12.5A, 10V  Operating Temperature - Mounting Type Surface Mount  Supplier Device Package 8-SOP  Package / Case 5SOP  |  | Transistors - FETs, MOSFETs - Single |
| FET Type N-Channel Technology MOSFET (Metal Oxide) Drain to Source Voltage (Vdss) Current - Continuous Drain (Id) @ 25°C 12.5A (Ta) Drive Voltage (Max Rds On, Min Rds On) 4V, 10V Vgs(th) (Max) @ Id 2.5V @ 1mA Gate Charge (Qg) (Max) @ Vgs 28nC @ 5V Input Capacitance (Ciss) (Max) @ Vds 1670pF @ 10V Vgs (Max) ±20V FET Feature - Power Dissipation (Max) 2W (Ta) Rds On (Max) @ Id, Vgs 9.1 mOhm @ 12.5A, 10V Operating Temperature - Mounting Type Surface Mount Supplier Device Package 8-SOP Package / Case 8-SOIC (0.154", 3.90mm Width)   | Package                                | 8-SOIC (0.154", 3.90mm Width)        |
| Technology  Drain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C  12.5A (Ta)  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  **EUV**  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  MOSFET (Metal Oxide)  30V  MOSFET (Metal Oxide)  30V  **EUV**  12.5A (Ta)  12.5A (Ta)  12.5A (Ta)  1670pF @ 10V  28NC @ 5V  1670pF @ 10V  220V  720  171  172  173  174  175  176  177  177  177  177  178  179  170  170  170  170  170  170  170   | Series                                 | -                                    |
| Drain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C  12.5A (Ta)  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Cate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  Vgs (Max)  ET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  Surface Mount  Surface Mont  Supplier Device Package  Package / Case  | FET Type                               | N-Channel                            |
| Current - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Cate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  #20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  9.1 mOhm @ 12.5A, 10V  Operating Temperature  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  12.5A (Ta)  12.5A (Ta)  12.5A (Ta)  12.5A (Ta)  12.5A (Ta)  4V, 10V  2.5V @ 1mA  1670pF @ 10V  2.5V  2.5V  2.5V  2.5V  2.5V  2.5V  2.5V  3.5V  4.5V  4.5 | Technology                             | MOSFET (Metal Oxide)                 |
| Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Cate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  Avy (Nax)  4V, 10V  2.5V @ 1mA  2.5 | Drain to Source Voltage (Vdss)         | 30V                                  |
| 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  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  28nC @ 5V  1670pF @ 10V  +20V  FET (Fe at 10V  -  POWE (Ta)  9.1 mOhm @ 12.5A, 10V  Surface Mount  Surface Mount  Supplier Device Package  8-SOIC (0.154", 3.90mm Width)  | Current - Continuous Drain (Id) @ 25°C | 12.5A (Ta)                           |
| Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  1670pF @ 10V  Vgs (Max)  ±20V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  9.1 mOhm @ 12.5A, 10V  Operating Temperature  - Mounting Type  Surface Mount  Supplier Device Package  Package / Case  8-SOIC (0.154", 3.90mm Width)  | Drive Voltage (Max Rds On, Min Rds On) | 4V, 10V                              |
| Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  E20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Mounting Type  Surface Mount  Supplier Device Package  Package / Case  1670pF @ 10V  2W (Ta)  9.1 mOhm @ 12.5A, 10V  Surface Mount  Surface Mount  8-SOP  8-SOIC (0.154", 3.90mm Width)  | Vgs(th) (Max) @ Id                     | 2.5V @ 1mA                           |
| Vgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs9.1 mOhm @ 12.5A, 10VOperating Temperature-Mounting TypeSurface MountSupplier Device Package8-SOPPackage / Case8-SOIC (0.154", 3.90mm Width)  | Gate Charge (Qg) (Max) @ Vgs           | 28nC @ 5V                            |
| FET Feature - Power Dissipation (Max) 2W (Ta) Rds On (Max) @ Id, Vgs 9.1 mOhm @ 12.5A, 10V Operating Temperature - Mounting Type Surface Mount Supplier Device Package 8-SOP Package / Case 8-SOIC (0.154", 3.90mm Width)  | Input Capacitance (Ciss) (Max) @ Vds   | 1670pF @ 10V                         |
| Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  9.1 mOhm @ 12.5A, 10V  Operating Temperature  - Mounting Type  Surface Mount  Supplier Device Package  8-SOP  Package / Case  8-SOIC (0.154", 3.90mm Width)   | Vgs (Max)                              | ±20V                                 |
| Rds On (Max) @ Id, Vgs 9.1 mOhm @ 12.5A, 10V  Operating Temperature -  Mounting Type Surface Mount  Supplier Device Package 8-SOP  Package / Case 8-SOIC (0.154", 3.90mm Width)  | FET Feature                            | -                                    |
| Operating Temperature Mounting Type Surface Mount Supplier Device Package 8-SOP Package / Case 8-SOIC (0.154", 3.90mm Width)   | Power Dissipation (Max)                | 2W (Ta)                              |
| Mounting Type Surface Mount Supplier Device Package 8-SOP Package / Case 8-SOIC (0.154", 3.90mm Width)   | Rds On (Max) @ Id, Vgs                 | 9.1 mOhm @ 12.5A, 10V                |
| Supplier Device Package 8-SOP Package / Case 8-SOIC (0.154", 3.90mm Width)   | Operating Temperature                  | -                                    |
| Package / Case 8-SOIC (0.154", 3.90mm Width)   | Mounting Type                          | Surface Mount                        |
|  | Supplier Device Package                | 8-SOP                                |
| Report errors?   | Package / Case                         | 8-SOIC (0.154", 3.90mm Width)        |
|  |  | Report errors?                       |

#### RSH125N03TB1 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.

### RSH125N03TB1 Payment Methods



















### RSH125N03TB1 Shipping Methods













If you have any question about RSH125N03TB1, please do not hesitate to contact us!

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