

# IPD65R380E6BTMA1

### IPD65R380E6BTMA1 Information



For Reference Only

Part Number IPD65R380E6BTMA1

Manufacturer Infineon Technologies

Category Discrete Semiconductor Products

Transistors - FETs, MOSFETs - Single

**Description** MOSFET N-CH 650V 10.6A TO252 **Package** TO-252-3, DPak (2 Leads + Tab), SC-63

For the pricing/inventory/lead time, please contact

us

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



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# IPD65R380E6BTMA1 Specifications

| Manufacturer Part Number         IPD65R380E6BTMA1           Manufacturer         Infineon Technologies           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-252-3, DPak (2 Leads + Tab), SC-63           Series         CoolMOS?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         650V           Current - Continuous Drain (Id) @ 25°C         10.6A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         3.5V @ 320µA           Gate Charge (Qg) (Max) @ Vgs         39nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         710pF @ 100V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         83W (Tc)           Rds On (Max) @ Id, Vgs         380 mOhm @ 3.2A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         PG-T0252-3           Package / Case         TO-252-3, DPak (2 Leads + Tab), SC-63           Report errors?  |  |                                       |
|---|--|---------------------------------------|
| Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-252-3, DPak (2 Leads + Tab), SC-63           Series         CoolMOS?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         650V           Current - Continuous Drain (Id) @ 25°C         10.6A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         3.5V @ 320μA           Gate Charge (Qg) (Max) @ Vgs         39nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         710pF @ 100V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         83W (Tc)           Rds On (Max) @ Id, Vgs         380 mOhm @ 3.2A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         PG-TO252-3           Package / Case         TO-252-3, DPak (2 Leads + Tab), SC-63  | Manufacturer Part Number               | IPD65R380E6BTMA1                      |
| Package         TO-252-3, DPak (2 Leads + Tab), SC-63           Series         CoolMOS?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         650V           Current - Continuous Drain (Id) @ 25°C         10.6A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         3.5V @ 320μA           Gate Charge (Qg) (Max) @ Vgs         39nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         710pF @ 100V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         83W (Tc)           Rds On (Max) @ Id, Vgs         380 mOhm @ 3.2A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         PG-TO252-3           Package / Case         TO-252-3, DPak (2 Leads + Tab), SC-63  | Manufacturer                           | Infineon Technologies                 |
| Package         TO-252-3, DPak (2 Leads + Tab), SC-63           Series         CoolMOS?           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         650V           Current - Continuous Drain (Id) @ 25°C         10.6A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         10V           Vgs(th) (Max) @ Id         3.5V @ 320μA           Gate Charge (Qg) (Max) @ Vgs         39nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         710pF @ 100V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         83W (Tc)           Rds On (Max) @ Id, Vgs         380 mOhm @ 3.2A, 10V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         PG-TO252-3           Package / Case         TO-252-3, DPak (2 Leads + Tab), SC-63  | Category                               | Discrete Semiconductor Products       |
| SeriesCoolMOS?FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)650VCurrent - Continuous Drain (Id) @ 25°C10.6A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id3.5V @ 320μAGate Charge (Qg) (Max) @ Vgs39nC @ 10VInput Capacitance (Ciss) (Max) @ Vds710pF @ 100VVgs (Max)±20VFET Feature-Power Dissipation (Max)83W (Tc)Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63   |  | Transistors - FETs, MOSFETs - Single  |
| FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)650 VCurrent - Continuous Drain (Id) @ 25°C10.6A (Tc)Drive Voltage (Max Rds On, Min Rds On)10 VVgs(th) (Max) @ Id3.5 V @ 320μAGate Charge (Qg) (Max) @ Vgs39nC @ 10 VInput Capacitance (Ciss) (Max) @ Vds710pF @ 100 VVgs (Max)±20 VFET Feature-Power Dissipation (Max)83W (Tc)Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10 VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63  | Package                                | TO-252-3, DPak (2 Leads + Tab), SC-63 |
| TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)650VCurrent - Continuous Drain (Id) @ 25°C10.6A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id3.5V @ 320μAGate Charge (Qg) (Max) @ Vgs39nC @ 10VInput Capacitance (Ciss) (Max) @ Vds710pF @ 100VVgs (Max)±20VFET Feature-Power Dissipation (Max)83W (Tc)Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63  | Series                                 | CoolMOS?                              |
| Drain to Source Voltage (Vdss)650VCurrent - Continuous Drain (Id) @ 25°C10.6A (Tc)Drive Voltage (Max Rds On, Min Rds On)10VVgs(th) (Max) @ Id3.5V @ 320μAGate Charge (Qg) (Max) @ Vgs39nC @ 10VInput Capacitance (Ciss) (Max) @ Vds710pF @ 100VVgs (Max)±20VFET Feature-Power Dissipation (Max)83W (Tc)Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63  | 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  380 mOhm @ 3.2A, 10V  Operating Temperature  Supplier Device Package  PG-TO252-3  Package / Case  10.6A (Tc)  10.6  10.6  10.6  10.6A (Tc)  10.6  10 | Technology                             | MOSFET (Metal Oxide)                  |
| Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  3.5V @ 320μA  Gate Charge (Qg) (Max) @ Vgs  39nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds  710pF @ 100V  Vgs (Max)  ±20V  FET Feature  - Power Dissipation (Max)  83W (Tc)  Rds On (Max) @ Id, Vgs  380 mOhm @ 3.2A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-TO252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63  | Drain to Source Voltage (Vdss)         | 650V                                  |
| Vgs(th) (Max) @ Id       3.5V @ 320μA         Gate Charge (Qg) (Max) @ Vgs       39nC @ 10V         Input Capacitance (Ciss) (Max) @ Vds       710pF @ 100V         Vgs (Max)       ±20V         FET Feature       -         Power Dissipation (Max)       83W (Tc)         Rds On (Max) @ Id, Vgs       380 mOhm @ 3.2A, 10V         Operating Temperature       -55°C ~ 150°C (TJ)         Mounting Type       Surface Mount         Supplier Device Package       PG-TO252-3         Package / Case       TO-252-3, DPak (2 Leads + Tab), SC-63  | Current - Continuous Drain (Id) @ 25°C | 10.6A (Tc)                            |
| Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  710pF @ 100V  Vgs (Max)  ±20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  380 mOhm @ 3.2A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-TO252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63  | Drive Voltage (Max Rds On, Min Rds On) | 10V                                   |
| Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  #20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-T0252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63  | Vgs(th) (Max) @ Id                     | 3.5V @ 320µA                          |
| Vgs (Max)±20VFET Feature-Power Dissipation (Max)83W (Tc)Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63   | Gate Charge (Qg) (Max) @ Vgs           | 39nC @ 10V                            |
| FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  380 mOhm @ 3.2A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-TO252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63   | Input Capacitance (Ciss) (Max) @ Vds   | 710pF @ 100V                          |
| Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  380 mOhm @ 3.2A, 10V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-TO252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63  | Vgs (Max)                              | ±20V                                  |
| Rds On (Max) @ Id, Vgs380 mOhm @ 3.2A, 10VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeSurface MountSupplier Device PackagePG-TO252-3Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63   | FET Feature                            | -                                     |
| Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  PG-TO252-3  Package / Case  TO-252-3, DPak (2 Leads + Tab), SC-63   | Power Dissipation (Max)                | 83W (Tc)                              |
| Mounting Type Surface Mount Supplier Device Package PG-TO252-3 Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63   | Rds On (Max) @ Id, Vgs                 | 380 mOhm @ 3.2A, 10V                  |
| Supplier Device Package PG-TO252-3 Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63   | Operating Temperature                  | -55°C ~ 150°C (TJ)                    |
| Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63  | Mounting Type                          | Surface Mount                         |
|   | Supplier Device Package                | PG-TO252-3                            |
| Report errors?  | Package / Case                         | TO-252-3, DPak (2 Leads + Tab), SC-63 |
|   |  | Report errors?                        |

### IPD65R380E6BTMA1 Guarantees



#### **Ouality 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.

### IPD65R380E6BTMA1 Payment Methods



















### IPD65R380E6BTMA1 Shipping Methods













If you have any question about IPD65R380E6BTMA1, please do not hesitate to contact us!

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