



## MTP50P03HDL Information



For Reference Only

Part Number MTP50P03HDL
Manufacturer ON Semiconductor

Category Discrete Semiconductor Products

Transistors - FETs, MOSFETs - Single

**Description** MOSFET P-CH 30V 50A TO-220AB

Package TO-220-3

For the pricing/inventory/lead time, please contact

us

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# **MTP50P03HDL Specifications**

Manufacturer Part Number         MTP50P03HDL           Manufacturer         ON Semiconductor           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-220-3           Series         -           FET Type         P-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         30V           Current - Continuous Drain (Id) @ 25°C         50A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         5V           Vgs(th) (Max) @ Id         2V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         100nC @ 5V           Input Capacitance (Ciss) (Max) @ Vds         4900pF @ 25V           Vgs (Max)         ±15V           FET Feature         -           Power Dissipation (Max)         125W (Tc)           Rds On (Max) @ Id, Vgs         25 mOhm @ 25A, 5V           Operating Temperature         -55°C ~ 150°C (TJ)           Mounting Type         Through Hole           Supplier Device Package         TO-220AB           Package / Case         TO-220-3		
CategoryDiscrete Semiconductor ProductsTransistors - FETs, MOSFETs - SinglePackageTO-220-3Series-FET TypeP-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C50A (Tc)Drive Voltage (Max Rds On, Min Rds On)5VVgs(th) (Max) @ Id2V @ 250μAGate Charge (Qg) (Max) @ Vgs100nC @ 5VInput Capacitance (Ciss) (Max) @ Vds4900pF @ 25VVgs (Max)±15VFET Feature-Power Dissipation (Max)125W (Tc)Rds On (Max) @ Id, Vgs25 mOhm @ 25A, 5VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220AB	Manufacturer Part Number	MTP50P03HDL
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Technology  Drain to Source Voltage (Vdss)  Current - Continuous Drain (Id) @ 25°C  50A (Tc)  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  Operating Temperature  Supplier Device Package  MOSFET (Metal Oxide)  30V  30V  30V  30V  50A  100  50A  100  20  20  20  20  20  20  30  40  20  20  20  20  20  30  40  20  20  20  30  40  20  20  20  40  20  20  40  20  2	Series	-
Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C50A (Tc)Drive Voltage (Max Rds On, Min Rds On)5VVgs(th) (Max) @ Id2V @ 250μAGate Charge (Qg) (Max) @ Vgs100nC @ 5VInput Capacitance (Ciss) (Max) @ Vds4900pF @ 25VVgs (Max)±15VFET Feature-Power Dissipation (Max)125W (Tc)Rds On (Max) @ Id, Vgs25 mOhm @ 25A, 5VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220AB	FET Type	P-Channel
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Drive Voltage (Max Rds On, Min Rds On) 5V $Vgs(th) (Max) @ Id 2V @ 250\mu A$ $Gate Charge (Qg) (Max) @ Vgs 100nC @ 5V$ $Input Capacitance (Ciss) (Max) @ Vds 4900pF @ 25V$ $Vgs (Max) \pm 15V$ $FET Feature - Power Dissipation (Max) 125W (Tc) Rds On (Max) @ Id, Vgs 25 mOhm @ 25A, 5V$ $Operating Temperature -55^{\circ}C \sim 150^{\circ}C (TJ)$ $Mounting Type Through Hole$ $Supplier Device Package To-220AB$	Drain to Source Voltage (Vdss)	30V
Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  4900pF @ 25V  Vgs (Max)  ETSV  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Through Hole  Supplier Device Package  2V @ 250μA  100nC @ 5V  4900pF @ 25V  4900pF @ 25V  25V  4900pF @ 25V  4900pF @ 25V  4900pF @ 25V  4900pF @ 25V  Through Hole  TO-220AB	Current - Continuous Drain (Id) @ 25°C	50A (Tc)
Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  4900pF @ 25V  Vgs (Max)  ±15V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  25 mOhm @ 25A, 5V  Operating Temperature  -55°C ~ 150°C (TJ)  Mounting Type  Through Hole  Supplier Device Package  TO-220AB	Drive Voltage (Max Rds On, Min Rds On)	5V
Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  ±15V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Through Hole  Supplier Device Package  4900pF @ 25V  50V  Through Hole  TO-220AB	Vgs(th) (Max) @ Id	2V @ 250μA
Vgs (Max)±15VFET Feature-Power Dissipation (Max)125W (Tc)Rds On (Max) @ Id, Vgs25 mOhm @ 25A, 5VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220AB	Gate Charge (Qg) (Max) @ Vgs	100nC @ 5V
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Rds On (Max) @ Id, Vgs25 mOhm @ 25A, 5VOperating Temperature-55°C ~ 150°C (TJ)Mounting TypeThrough HoleSupplier Device PackageTO-220AB	FET Feature	-
Operating Temperature -55°C ~ 150°C (TJ)  Mounting Type Through Hole  Supplier Device Package TO-220AB	Power Dissipation (Max)	125W (Tc)
Mounting Type Through Hole Supplier Device Package TO-220AB	Rds On (Max) @ Id, Vgs	25 mOhm @ 25A, 5V
Supplier Device Package TO-220AB	Operating Temperature	-55°C ~ 150°C (TJ)
	Mounting Type	Through Hole
Package / Case TO-220-3	Supplier Device Package	TO-220AB
	Package / Case	TO-220-3
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