

## **TC4452VAT Information**



For Reference Only

Part Number TC4452VAT

Manufacturer Microchip Technology

Category Integrated Circuits (ICs)
PMIC - Gate Drivers

**Description** IC MOSFET DVR 12A HS TO220-5

Package TO-220-5

For the pricing/inventory/lead time, please contact

us

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



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## **TC4452VAT Specifications**

Manufacturer Part Number         TC4452VAT           Manufacturer         Microchip Technology           Category         Integrated Circuits (ICs)           PACKAGE         TO-220-5           Series         -           Driven Configuration         Low-Side           Channel Type         Single           Number of Drivers         I           Gate Type         IGBT, N-Channel, P-Channel MOSFET           Voltage - Supply         4.5 V ~ 18 V           Logic Voltage - VIL, VIH         0.8V, 2.4V           Current - Peak Output (Source, Sink)         13A, 13A           Input Type         Non-Inverting           High Side Voltage - Max (Bootstrap)         -           Rise / Fall Time (Typ)         30ns, 32ns           Operating Temperature         -40°C ~ 150°C (TJ)           Mounting Type         Through Hole           Package / Case         TO-220-5           Supplier Device Package         TO-220-5		
CategoryIntegrated Circuits (ICs)PMIC - Gate DriversPackageTO-220-5Series-Driven ConfigurationLow-SideChannel TypeSingleNumber of Drivers1Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)13A, 13AInput TypeNon-InvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)30ns, 32nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeThrough HolePackage / CaseTO-220-5Supplier Device PackageTO-220-5	Manufacturer Part Number	TC4452VAT
Package TO-220-5 Series - Configuration Low-Side Channel Type Single Number of Drivers 1 Gate Type IGBT, N-Channel, P-Channel MOSFET Voltage - Supply 4.5 V ~ 18 V Logic Voltage - VIL, VIH 0.8V, 2.4V Current - Peak Output (Source, Sink) 13A, 13A Input Type Non-Inverting High Side Voltage - Max (Bootstrap) - Rise / Fall Time (Typ) 30ns, 32ns Operating Temperature -40°C ~ 150°C (TJ) Mounting Type Through Hole Package / Case Supplier Device Package TO-220-5	Manufacturer	Microchip Technology
PackageTO-220-5Series-Driven ConfigurationLow-SideChannel TypeSingleNumber of Drivers1Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)13A, 13AInput TypeNon-InvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)30ns, 32nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeThrough HolePackage / CaseTO-220-5Supplier Device PackageTO-220-5	Category	Integrated Circuits (ICs)
Series-Driven ConfigurationLow-SideChannel TypeSingleNumber of Drivers1Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)13A, 13AInput TypeNon-InvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)30ns, 32nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeThrough HolePackage / CaseTO-220-5Supplier Device PackageTO-220-5		PMIC - Gate Drivers
Driven Configuration  Channel Type  Single  Number of Drivers  1  Gate Type  IGBT, N-Channel, P-Channel MOSFET  Voltage - Supply  4.5 V ~ 18 V  Logic Voltage - VIL, VIH  0.8V, 2.4V  Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Package	TO-220-5
Channel Type  Number of Drivers  1  Gate Type  IGBT, N-Channel, P-Channel MOSFET  Voltage - Supply  4.5 V ~ 18 V  Logic Voltage - VIL, VIH  0.8V, 2.4V  Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  30ns, 32ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  Supplier Device Package  TO-220-5	Series	-
Number of Drivers1Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)13A, 13AInput TypeNon-InvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)30ns, 32nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeThrough HolePackage / CaseTO-220-5Supplier Device PackageTO-220-5	Driven Configuration	Low-Side
Gate Type  IGBT, N-Channel, P-Channel MOSFET  Voltage - Supply  4.5 V ~ 18 V  Logic Voltage - VIL, VIH  0.8V, 2.4V  Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  30ns, 32ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Channel Type	Single
Voltage - Supply  Logic Voltage - VIL, VIH  0.8V, 2.4V  Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  30ns, 32ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Number of Drivers	1
Logic Voltage - VIL, VIH  Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Gate Type	IGBT, N-Channel, P-Channel MOSFET
Current - Peak Output (Source, Sink)  Input Type  Non-Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Voltage - Supply	4.5 V ~ 18 V
Input Type  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package	Logic Voltage - VIL, VIH	0.8V, 2.4V
High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package  TO-220-5	Current - Peak Output (Source, Sink)	13A, 13A
Rise / Fall Time (Typ) 30ns, 32ns  Operating Temperature $-40^{\circ}\text{C} \sim 150^{\circ}\text{C}$ (TJ)  Mounting Type Through Hole  Package / Case TO-220-5  Supplier Device Package TO-220-5	Input Type	Non-Inverting
Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Through Hole  Package / Case  TO-220-5  Supplier Device Package  TO-220-5	High Side Voltage - Max (Bootstrap)	-
Mounting Type Through Hole Package / Case TO-220-5 Supplier Device Package TO-220-5	Rise / Fall Time (Typ)	30ns, 32ns
Package / Case TO-220-5 Supplier Device Package TO-220-5	Operating Temperature	-40°C ~ 150°C (TJ)
Supplier Device Package TO-220-5	Mounting Type	Through Hole
	Package / Case	TO-220-5
Report errors?	Supplier Device Package	TO-220-5
		Report errors

### **TC4452VAT 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.

## **TC4452VAT Payment Methods**



















## **TC4452VAT Shipping Methods**













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