



# MCP1403-E/MF Information



For Reference Only

Part Number MCP1403-E/MF

Manufacturer Microchip Technology

Category Integrated Circuits (ICs)
PMIC - Gate Drivers

**Description** IC MOSFET DVR 4.5A DUAL 8DFN

Package 8-VDFN Exposed Pad

For the pricing/inventory/lead time, please contact

us

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



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# MCP1403-E/MF Specifications

Manufacturer Part Number       MCP1403-E/MF         Manufacturer       Microchip Technology         Category       Integrated Circuits (ICs)         PMIC - Gate Drivers         Package       8-VDFN Exposed Pad         Series       -         Driven Configuration       Low-Side         Channel Type       Independent         Number of Drivers       2         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)       4.5A, 4.5A         Input Type       Inverting         High Side Voltage - Max (Bootstrap)       -         Rise / Fall Time (Typ)       15ns, 18ns         Operating Temperature       -40°C ~ 150°C (TJ)         Mounting Type       Surface Mount         Package / Case       8-VDFN Exposed Pad         Supplier Device Package       8-DFN-S (6x5)		
CategoryIntegrated Circuits (ICs)PMIC - Gate DriversPackage8-VDFN Exposed PadSeries-Driven ConfigurationLow-SideChannel TypeIndependentNumber of Drivers2Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)4.5A, 4.5AInput TypeInvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)15ns, 18nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeSurface MountPackage / Case8-VDFN Exposed PadSupplier Device Package8-DFN-S (6xS)	Manufacturer Part Number	MCP1403-E/MF
Package 8-VDFN Exposed Pad  Series - Driven Configuration Low-Side Channel Type Independent Number of Drivers 2 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) 4.5A, 4.5A Input Type Inverting High Side Voltage - Max (Bootstrap) - Rise / Fall Time (Typ) 15ns, 18ns Operating Temperature -40°C ~ 150°C (TJ) Mounting Type Surface Mount Package / Case 8-VDFN Exposed Pad Supplier Device Package 8-DFN-S (6x5)	Manufacturer	Microchip Technology
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Series-Driven ConfigurationLow-SideChannel TypeIndependentNumber of Drivers2Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)4.5A, 4.5AInput TypeInvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)15ns, 18nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeSurface MountPackage / Case8-VDFN Exposed PadSupplier Device Package8-DFN-S (6x5)		PMIC - Gate Drivers
Driven Configuration  Channel Type  Independent  Number of Drivers  2  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  Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package	Package	8-VDFN Exposed Pad
Channel Type Number of Drivers 2 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 Inverting High Side Voltage - Max (Bootstrap) Rise / Fall Time (Typ) 15ns, 18ns Operating Temperature -40°C ~ 150°C (TJ) Mounting Type Surface Mount Package / Case 8-VDFN Exposed Pad Supplier Device Package 8-DFN-S (6x5)	Series	-
Number of Drivers2Gate TypeIGBT, N-Channel, P-Channel MOSFETVoltage - Supply4.5 V ~ 18 VLogic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)4.5A, 4.5AInput TypeInvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)15ns, 18nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeSurface MountPackage / Case8-VDFN Exposed PadSupplier Device Package8-DFN-S (6x5)	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  Inverting  High Side Voltage - Max (Bootstrap)  - Rise / Fall Time (Typ)  15ns, 18ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package	Channel Type	Independent
Voltage - Supply  Logic Voltage - VIL, VIH  0.8V, 2.4V  Current - Peak Output (Source, Sink)  Input Type  Inverting  High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package	Number of Drivers	2
Logic Voltage - VIL, VIH0.8V, 2.4VCurrent - Peak Output (Source, Sink)4.5A, 4.5AInput TypeInvertingHigh Side Voltage - Max (Bootstrap)-Rise / Fall Time (Typ)15ns, 18nsOperating Temperature-40°C ~ 150°C (TJ)Mounting TypeSurface MountPackage / Case8-VDFN Exposed PadSupplier Device Package8-DFN-S (6x5)	Gate Type	IGBT, N-Channel, P-Channel MOSFET
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High Side Voltage - Max (Bootstrap)  Rise / Fall Time (Typ)  15ns, 18ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package  8-DFN-S (6x5)	Current - Peak Output (Source, Sink)	4.5A, 4.5A
Rise / Fall Time (Typ)  15ns, 18ns  Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package  8-DFN-S (6x5)	Input Type	Inverting
Operating Temperature  -40°C ~ 150°C (TJ)  Mounting Type  Surface Mount  Package / Case  8-VDFN Exposed Pad  Supplier Device Package  8-DFN-S (6x5)	High Side Voltage - Max (Bootstrap)	-
Mounting Type Surface Mount  Package / Case 8-VDFN Exposed Pad  Supplier Device Package 8-DFN-S (6x5)	Rise / Fall Time (Typ)	15ns, 18ns
Package / Case 8-VDFN Exposed Pad Supplier Device Package 8-DFN-S (6x5)	Operating Temperature	$-40^{\circ}\text{C} \sim 150^{\circ}\text{C} \text{ (TJ)}$
Supplier Device Package 8-DFN-S (6x5)	Mounting Type	Surface Mount
	Package / Case	8-VDFN Exposed Pad
Report errors?	Supplier Device Package	8-DFN-S (6x5)
100000000000000000000000000000000000000		Report errors?

#### MCP1403-E/MF 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.

### MCP1403-E/MF Payment Methods





















# MCP1403-E/MF Shipping Methods













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