

1ED3124MU12FXUMA1

Data Sheet

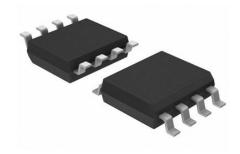
Manufacturers <u>Infineon Technologies Corporation</u>

Package/Case PG-DSO-8

Product Type Integrated Circuits (ICs)

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for 1ED3124MU12FXUMA1 or <u>Emailto:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

EiceDRIVERTM Compact single-channel isolated gate driver with 14 A typical sinking and sourcing peak output current in DSO-8 narrow-body package for IGBTs, MOSFETs and SiC MOSFETs.

1ED3124MU12F belongs to the EiceDRIVERTM Compact 1ED31xx family (X3 Compact family). 1ED3124 offers separate sink and source output, accurate and stable timing, active shutdown to ensure a safe IGBT off-state in case the output chip is not connected to the power, short-circuit clamping to limit the gate voltage during short circuit. The driver can operate over a wide supply voltage range, either unipolar or bipolar.

EiceDRIVERTM Compact single channel isolated gate driver 1ED31xx family (X3 Compact family)

For use with 650 V/1200 V/1700 V/2300 V IGBTs, Si and SiC MOSFETs

2300 V functional offset voltage capable for selected applications

Galvanically isolated coreless transformer gate driver

14 A typical sinking and sourcing peak output current

40 V absolute maximum output supply voltage

90 ns propagation delay with 30 ns input filter

High common-mode transient immunity CMTI >200 kV/μs

Separate source and sink outputs

Short-circuit clamping and active shutdown

DSO-8 150 mil narrow-body package

10.5 V/12.5 V undervoltage lockout (UVLO) protection with hysteresis

Integrated filters reduce the need of external filters

Tight IC-to-IC turn on propagation delay matching (7 ns max.), tolerance improves application robustness without variations due to aging, current, and temperature

Suitable for operation at high ambient temperature and in fast switching applications

UL 1577>

Tight propagation delay allows minimum deadtime improving system efficiency and decreasing harmonic distortion

The precise threshold and timings, combined with UL 1577 certification enable superior application safety

Part No	Typ. Current	Feature	UVLO	Isolation Certification
1ED3124MU12F	14 A	Seperate output	10.5/12.5 V	UL 1577
1ED3125MU12F	10 A	Active Miller clamp	10.5/12.5 V	UL 1577
1ED3127MU12F	10 A	Active Miller clamp	12/14.2 V	UL 1577
1ED3140MU12F	6.5 A	Seperate output	8.6/9.3 V	UL 1577
1ED3141MU12F	6.5 A	Seperate output	11.1/12 V	UL 1577
1ED3142MU12F	6.5 A	Seperate output	12.6/13.6 V	UL 1577

Features

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Related Products



BTT6050-1EKA

Infineon Technologies Corporation



TLE8209-1E

Infineon Technologies Corporation HSOP-20



BTS5020-1EKA

Infineon Technologies Corporation SOP14



1ED020I12FTA

Infineon Technologies Corporation PG-DSO-20



1ED020I12FA2

Infineon Technologies Corporation PG-DSO-20



BTT6010-1EKA

Infineon Technologies Corporation



1ED020I12-B2

Infineon Technologies Corporation SOP16



1EDI2001AS

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