

Product Overview

NCD57084: Isolated Compact IGBT Gate Driver with DESAT

For complete documentation, see the data sheet.

NCx57084 is a high current single channel IGBT gate driver with 2.5 kVrms internal galvanic isolation designed for high system efficiency and reliability in high power applications. The driver includes DESAT short circuit protection with soft turn off and fault reporting in a narrow body SOIC-8 package. NCx57084 accommodates wide range of input bias voltage and signal levels from 3.3 V to 20 V, and wide range of output bias voltage up to 30 V.

Features

- High Peak Output Current (+7 A/-7 A)
- Short Propagation Delays with Accurate Matching
- High Transient & Electromagnetic Immunity
- 2.5 KVrms On-Chip Galvanic Isolation
- Wide Bias Voltage Ranges and Input Voltage Range

Applications

- Motor Control
- Industrial Power Supplies
- Automotive Applications
- UPS
- HVAC

Benefits

- Improves system efficiency
- Improves PWM signal integrity
- Ruggedness in fast slew rate high voltage and high current switching applications
- Saves cost and board space while offering improved performance compared to opto-drivers
- Offers system design flexibility and allows the usage of commonly available system voltage rails

End Products

- Industrial Motor Drivers
- Data Center & Server Power Supplies
- Industrial Motor Drivers
- PTC Heaters and e-Cooling

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V _{in} Max (V)	V _{cc} Max (V)	Rise Time (ns)	Fall Time (ns)	Drive Source Current Typ (A)	Drive Sink Current Typ (A)	Turn On Prop. Delay Typ (ns)	Turn Off Prop. Delay Typ (ns)	Delay Matching	Package Type
NCD57084DR2G	1.6866	Pb-free Halide free non AEC-Q and PPAP	NEW	IGBT	1	Single	Galvanic Isolation	20	30	10	15	7000	7000	60	60	25	SOIC-8
NCV57084DR2G	1.2	AEC Qualified PPAP Capable Pb-free Halide free	NEW	IGBT	1	Single	Galvanic Isolation	20	30	10	15	7000	7000	60	60	25	SOIC-8