



Single switch Gate Driver (SCS-GDS-5004)

SCS Power

www.scspower.in

Description:

Our SCS-GDS-5004 is a compact yet powerful single switch gate driver for IGBT/MOSFET power switches; it has several protection features with on board isolated supply that ensure reliability and efficient switching performance.

Specifications:

High power IGBT/MOSFET gate driver
+15/-8 volts drive
3.3 and 5 volts pulse support
Up to 50 kHz switching frequency
Short circuit protection
Fault output
Buffered input for low noise
Under voltage protection
Power and fault indication LED
Up to 1000 volts DC link
3000Vrms isolation

Application:

This gate driver is suitable for any application for switching frequency up to 50kHz. Some of targeted applications are:

DC-DC converters

SMPS

UPS

PFC converters

Automation & testing

Input Connections:

Symbol	Description
G	Ground.
NC	No Connection.
F	Active low fault output for switch. In condition of fault pin voltage would be zero. Please connect the semiconductor switch as shown below otherwise gate driver will consider it as open circuit and fault indication will be ON.
P	Input pulse from microcontroller or DSP for switch
Vs	Power supply, +12Vdc nominal.

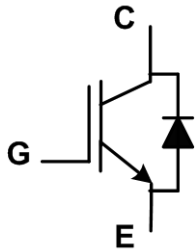
Output Connections:

Symbol	Description
A/C	Switch collector.
B/G	Switch gate.



C/E	Switch emitter.
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Connection diagram:



Max. operating switching frequency calculations:

$F_{smax} = 0.035/Q_g$ (where, Q_g is switch gate charge value. If this value is greater than 50kHz then considered 50kHz only as max switching frequency)

Indications:

Green LED: Power ON

Red LED: Fault Condition