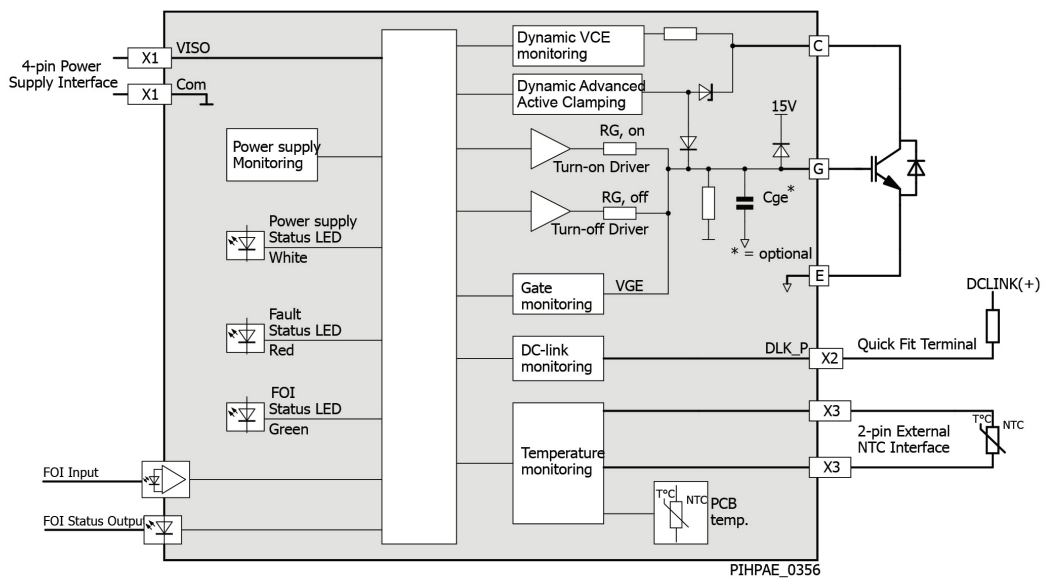


Programmable Plug-and-Play IGBT Gate Driver 1SP0635V2A0D

- Fiber-optic interface with serial bitstream output protocol
- Telemetry features (temperature and voltage measurements)
- Status monitoring/self diagnosis features (gate voltage, gate status, fiber optics status)
- Overvoltage protection by dynamic advanced active clamping (DAAC)
- Isolated external DC/DC power supply ISO6125R-33

Single-Channel Plug-and-Play Gate Driver for Blocking Voltages up to 3300 V



Applications

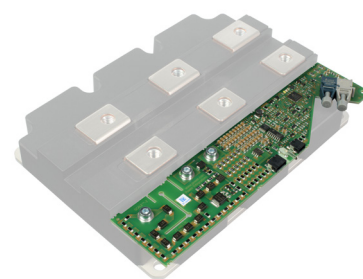
- Railway main inverters
- High-voltage DC transmission systems
- Medium-voltage drives
- Railroad power supplies
- Flexible AC transmission systems
- Industrial motor drives

Certifications

- Creepage and clearance according to IEC 61800-5-1 and IEC 62497-1

Product Details

Parameter	Min	Typical	Max	Unit
Nominal supply voltage				V
Supply current 1SP0635x2Mx @ $f_{IN} = 0$ Hz		149		mA
Per additional 1SP0635D2Sx @ $f_{IN} = 0$ Hz		35		mA
Supply current, full load 1SP0635x2Mx			400	mA
Output power			3	W
Gate voltage		+15 / -10		V
Peak output current (gate current)	-35		+35	A
Switching frequency (f_s ¹)	0		3	kHz
Duty cycle	0		100	%
UART Baud Rate		5		MBd
Data Packet Rate		75		kHz
DC-Link measuring range	0		3200	V
NTC measuring range	-40		130	°C
Operating temperature	-40		+85	°C



Companion Chip:
DC/DC power supply ISO6125R-33

¹ Maximum switching frequency depends on the IGBT gate charge. See data sheet for actual value of specific driver.

Design Support

Available Products

1SP0635 products list
(<https://www.power.com/products/scale-2-plug-and-play-drivers/1sp0635-digital>)

Available Accessories

1SP0635 accessories list
(<https://www.power.com/products/gate-driver-accessories/iso6125r>)