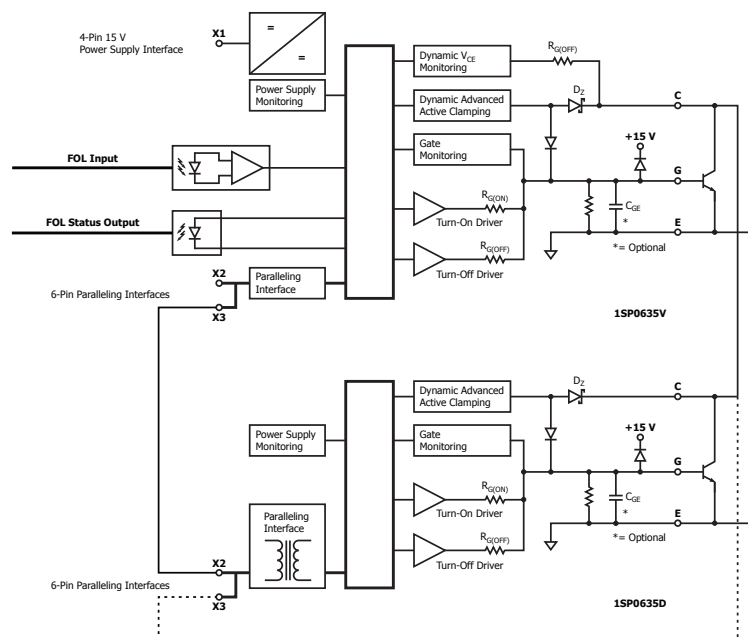


SCALE™ -2 Plug-and-Play Gate Driver 1SP0635

- Direct paralleling of IGBTs
- Supports two-level and multi-level topologies
- Fiberoptic interfaces
- +15 V (regulated) / -10 V gate driving
- IGBT short-circuit protection
- Dynamic Advanced Active Clamping
- Built-in isolated DC-DC converter

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

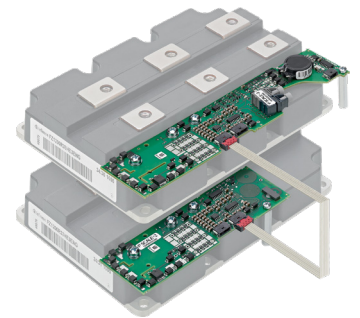
Certifications

- Creepage and clearance according to IEC 60077-1
- UL compliant

Product Details

Parameter	Min	Typical	Max	Unit
Nominal supply voltage		15		V
Supply current 1SP0635x2Mx @ $f_{IN} = 0$ Hz		120		mA
Per additional 1SP0635D2Sx @ $f_{IN} = 0$ Hz		35		mA
Supply current, full load 1SP0635x2Mx		325		mA
Output power (1SP0635V2Mx or 1SP0635SMx)		3		W
Output power (1SP0635D2Sx)		2.6		W
Gate voltage		+15 / -10		V
Peak output current (gate current)	-35		+35	A
Switching frequency (f_s^{-1})	0		30	kHz
Duty cycle	0		100	%
Creepage distance primary-secondary	21			mm
Clearance distance primary-secondary	21			mm
Dielectric test voltage (3.3 kV versions)	6000			VAC
Partial discharge extinction voltage (3.3 kV versions)	3630			V _{PEAK}
Operating temperature	-40		+85	°C

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



1SP0635 single-channel
plug-and-play gate driver

Design Support

Available Products 1SP0635 products list (www.power.com/1SP0635)

Application Note AN-1301: Do's and don'ts with SCALE-2 gate drivers (www.power.com/an-1301)