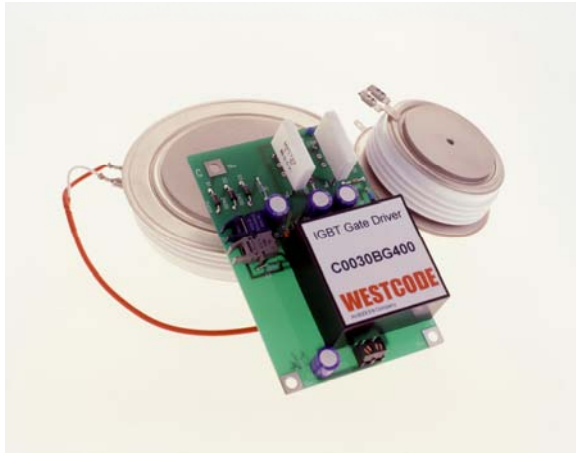


High Voltage IGBT Gate Driver – C0030BG400



Westcode Semiconductors Limited introduce a high voltage IGBT gate drive unit (GDU) designed to complement our range of high voltage Press-Pack IGBTs and standard IGBT modules.

The device, known as **C0030BG400**, is a single channel, 30A peak rated driver suitable for low and high side applications. With a DC link voltage of up to 3.5kV (5kV available on request) and with dv/dt immunity of over 100kV/μs, this GDU performs all of the necessary supervisory functions including under voltage lockout and SCSOA protection with user configurable response and feedback. The unit requires a simple 15V DC power supply and features fibre optic command and feedback signals.

This GDU is capable of driving virtually all IGBTs included in our range of press-pack devices, rated up to 5200V and 1500A, at frequencies from DC up to 20kHz. Options include standard variants set up for use with each of Westcode's range of Press-Pack IGBTs (see table below) and the core module for integration into end user PCBs. Additionally, our application engineers can develop semi-custom solutions based around the standard core module.

Type of IGBT	$R_{g(on)}(\Omega)$	$R_{g(off)}(\Omega)$	$C_g(nF)$	GDU part
T0360NA25A	33	15	-	C0030BG400SAA
T0500NA25E	22	15	-	C0030BG400SAB
T1200TA25A	12	6.8	-	C0030BG400SAC
T1500TA25E	10	6.8	-	C0030BG400SAD
T0160NA52A	33	15	10	C0030BG400SAE
T0250NA52E	22	10	25	C0030BG400SAF
T0650TA52A	10	5	80	C0030BG400SAG
T0900TA52E	6.8	4.7	100	C0030BG400SAH

Features

- 30A peak drive current (500ns rise time)
- 10kV AC rms isolation test
- Partial discharge free up to 4kV AC rms
- 100kV/μs dv/dt immunity
- Temperature range -40°C up to $+70^{\circ}\text{C}$ (-55°C up to $+80^{\circ}\text{C}$ available)
- $\pm 15\text{V}$ gate drive voltage
- Standard HP Versatile Link™ Fibre Optic links
- Status feedback signal
- User configurable SCSOA protection



The launch of this new complementary product demonstrates our continued commitment to provide our customers with complete solutions for power electronics and further strengthens our assemblies' capability. This GDU also provides our customers with a rapid route to prototype with our range of high voltage press-pack IGBTs without having to solve the additional problems associated with high isolation voltage gate drives. Data sheets, pricing and samples are available now.

Data sheets, pricing and samples are available now by contacting the Customer Service Team at Chippenham email: WSL.sales@westcode.com or telephone: +44 (0)1249 444525.