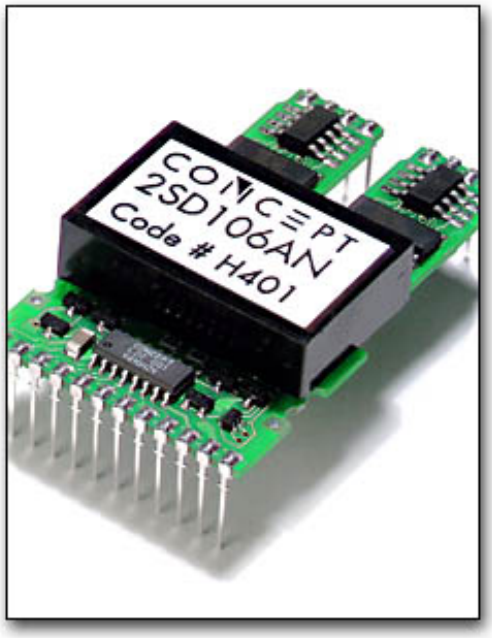
2SD106A



The 2SD 106A is an ultra-compact dual **SCALE** driver for IGBTs with blocking voltages up to 1200V. The two drive channels feature an **electrical isolation** between the control electronics and the power section.

Each channel is equipped with a programmable Vce monitoring function for **protection against short circuit** and over-current. The driver supplies a gate current of +/-6A. The gate voltage is +/-15V. The integrated DC/DC converter supplies a drive power of 1 W per channel.

The interface is compatible to all logic families (5...15V). The driver can be operated in two **modes**: either with two independent driver channels or as a half-bridge driver with internal dead-time generation.

Key Data in Overview

Parameter	min	typ	max	unit
Nominal supply voltage V_{DC}, V_{DD}		15		Vdc
Supply current without load $I_{DC} + I_{DD}$		35		mA
Supply current with maximal load Last $I_{DC} + I_{DD}$			170	mA
Output power DC/DC converter (both channels)			2	W
Efficiency DC/DC converter		85		%
Delay time input to output (turn on)		300		ns
Delay time input to output (turn off)		350		ns
Peak output current (gate current) I_G	-6		+6	A
Output rise time		100		ns
Output fall time		80		ns
Isolation test voltage (Vac/50Hz/1min)			4000	Vac
Partial discharge extinction voltage acc. IEC270		>1200		V_{peak}
Creep paht input to output		12,7		mm
Guaranteed dv/dt immunity (input to output) dV/dt	100			kV/µs
Operating temperature 2SD106AI	-40		+85	°C
Operating temperature 2SD106AN	0		+70	°C