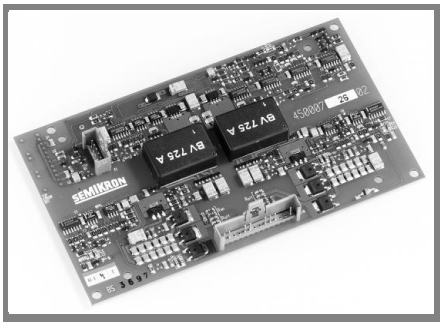
SKHI 26W, SKHI 26F



SEMIDRIVER™

Double IGBT driver

SKHI 26W, SKHI 26F

Features

- Double driver for half bridge modules
- SKHI 26 drives all SEMIKRON IGBT´s with V_{CE} up to 1200 V
- SKHI 26F has fibre optic input
- SKHI 26W has wire (galvanic) input
- CMOS compatible inputs
- Short circuit protection by V_{CE} monitoring and soft switch off
- Driver interlock top/bottom
- Isolation by transformers
- Supply undervoltage protection (< 13 V)
- Error latch / open-collector output (SKHI 26W)
- DC bus voltage up to 1200 V

Typical Applications

- High power switches or paralleled IGBTs
- Driver for IGBT modules in bridge circuits in choppers, inverter drives, UPS and welding inverters

1) Open-collector transistor

Absolute Maximum Ratings T_a = 25°C, unless otherwise specified

Symbol	Conditions	Values	Units
V_S	Supply voltage primary	18	V
V_{iH}	Input signal voltage (HIGH)	V_S ± 0,3	V
I_{iH}	Input signal current (HIGH)	0,34	mA
$Q_{Gate\ max}$	Max. output charge per pulse	± 10	µC
$Iout_{PEAK}$	Output peak current	± 8	A
$Iout_{AV}$	Output average current	± 100	mA
V_{CE}	Collector-emitter maximum voltage sense	1600	V
dv/dt	Rate of rise and fall of voltage (secondary to primary side)	75	kV/µs
$V_{isol\ IO}$	Isolation test volt. IN-OUT (2 sec. AC)	4000	V
T_{op}	Operationg temperature (SKHI 26W)	- 25 ... + 85	°C
	Operating temperature (SKHI 26F)	0 ... + 70	°C
T_{stq}	Storage temperature (SKHI 26W)	- 25 ... + 85	°C
	Storage temperature (SKHI 26F)	0 ... + 70	°C

Characteristics T_a = 25 °C, unless otherwise specified

Symbol	Conditions	min.	typ.	max.	Units
V_S	Supply voltage primary side		15 ± 0,6		V
I_S	Supply current primary side max.		700		mA
I_{SO}	Supply current primary side (stand by)		175		mA
V_{iT+}	Input threshold voltage (HIGH) min		12,9		V
V_{iT-}	Input threshold voltage (LOW) max		2,1		V
$V_{G(on)}$	Turn-on output gate voltage		+15		V
$V_{G(off)}$	Turn-off output gate voltage		- 8		V
$td(on)_{IO}$	Input-output turn-on propagation time		1,0 + tTD		µs
$td(off)_{IO}$	Input-output turn-off propagation time		1,0		µs
t_{TD}	Dead time		3,3		µs
$t_{pon-error}$	propag. delay time - on error		1,0		µs
t_{pReset}	Min. pulse width error memory RESET		5,0		µs
V_{OH} [1)]	Logic high output voltage ERROR state		max. 30		V
V_{OL} [1)]	Logic low output voltage NO-ERROR state		max. 0,5		V
I_{sink} [1)]	Sink output current NO-ERROR		30		mA
V_{CEstat}	Reference voltage for V_{CE} monitoring		5,2		V

