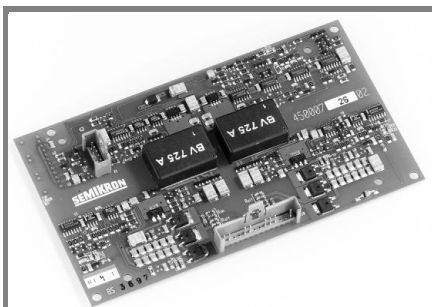


SKHI 26W, SKHI 26F



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		$T_a = 25^\circ\text{C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
V_S	Supply voltage primary	18	V
V_{iH}	Input signal voltage (HIGH)	$V_S \pm 0,3$	V
I_{iH}	Input signal current (HIGH)	0,34	mA
$Q_{\text{Gate max}}$	Max. output charge per pulse	± 10	μC
I_{outPEAK}	Output peak current	± 8	A
I_{outAV}	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
$V_{\text{isol IO}}$	Isolation test volt. IN-OUT (2 sec. AC)	4000	V
T_{op}	Operating temperature (SKHI 26W)	- 25 ... + 85	$^\circ\text{C}$
	Operating temperature (SKHI 26F)	0 ... + 70	$^\circ\text{C}$
T_{stq}	Storage temperature (SKHI 26W)	- 25 ... + 85	$^\circ\text{C}$
	Storage temperature (SKHI 26F)	0 ... + 70	$^\circ\text{C}$

Characteristics		$T_a = 25^\circ\text{C}$, unless otherwise specified			
Symbol	Conditions	min.	typ.	max.	Units
V_S	Supply voltage primary side		$15 \pm 0,6$		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
$V_{G(\text{on})}$	Turn-on output gate voltage		+15		V
$V_{G(\text{off})}$	Turn-off output gate voltage		- 8		V
$td(\text{on})_{IO}$	Input-output turn-on propagation time		$1,0 + t_{TD}$		μs
$td(\text{off})_{IO}$	Input-output turn-off propagation time		1,0		μs
t_{TD}	Dead time		3,3		μs
$t_{\text{pon-error}}$	propag. delay time - on error		1,0		μs
$t_{p\text{Reset}}$	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
$I_{\text{sink}}^{1)}$	Sink output current NO-ERROR		30		mA
$V_{CE\text{stat}}$	Reference voltage for V_{CE} monitoring		5,2		V

This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.