14.1 SEMIDRIVER®-Accessories (for SEMIDRIVER® SKHI 21 and SKHI 22)

Recommended piece parts list

Part No. [1]	Function [2]	Designation	Recommended Values [2]
C1	V_S [4]	Radial Electrol. cap.	10...47 µF / 35 V
C2	C_{CE}BOT	Polystyrene cap.	0,33 nF > 25 V
C3	C_{CE}TOP	Polystyrene cap.	0,33 nF > 25 V
R1	$R_{TD}1$	Resistor [2]	0 - 100 kΩ / 0,25 W
R2	$R_{TD}2$	Resistor [2]	0 - 100 kΩ / 0,25 W
R3	R_{CE2}BOT	Resistor [2]	typ. 24 kΩ / 0,6 W
R4	R_{Gon2}BOT	Resistor [3]	3,3 ... 100 Ω
R5	R_{Goff2}BOT	Resistor [3]	3,3 ... 100 Ω
R6	R_{Goff1}TOP	Resistor [3]	3,3 ... 100 Ω
R7	R_{Gon1}TOP	Resistor [3]	3,3 ... 100 Ω
R8	R_{CE1}TOP	Resistor [2]	typ. 24 kΩ / 0,6 W
Conn 1	input	1 x MOLEX 7395 [6]-(5 way - 2,54 pitch)	
Conn 2...5	out par.	for cables joining to slave boards	
Conn 6 - 4	out	4 x MOLEX 90030 - 1001 [7] (for 2,8 x 0,5)	
TP1	V_{CE} Top +	Wire connection to + V_ERAIL	
TP2	V_{CE} mon E1	1 jumper [5] to connect BOTT.C2 to TOP emitter (E1)	
TP3	V_{CE} mon C2		

[7] MOLEX Mini T Terminal with solder post, loose-form (Chain form: 90030-0001)

Printed Circuit Board (PCB) SKPC 2006 [1]

Features

- blank PCB
- glass fibre epoxy
- without piece parts
- ready to fit parts for wave soldering
- output connectors positioned for direct push-on to SEMITRANS-3
- 3 hole fixing

[1] SKPC 2006 normally should be completed by the customer, but it can be made available with parts fitted, on mutual agreement on request.
[2] See datasheet SKHI 21, SKHI 22 page B14 – 21
[3] Values to be chosen as per datasheet of SKHI 22 and of the device to be driven.
[4] For decoupling the power supply at input
[5] Must be connected (C2 - E1) for VCE monitoring
[6] Right Angle Friction LOCK mates with MOLEX 6471, 7720S, 2695

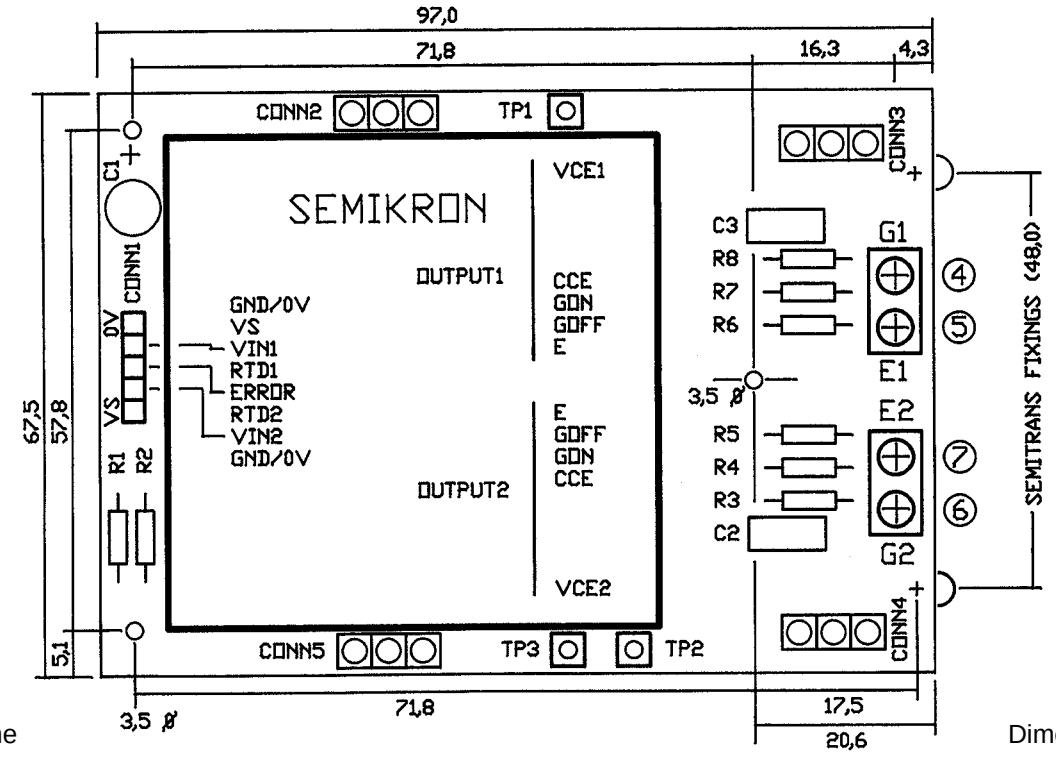

Fig. 1 Outline

Dimensions in mm

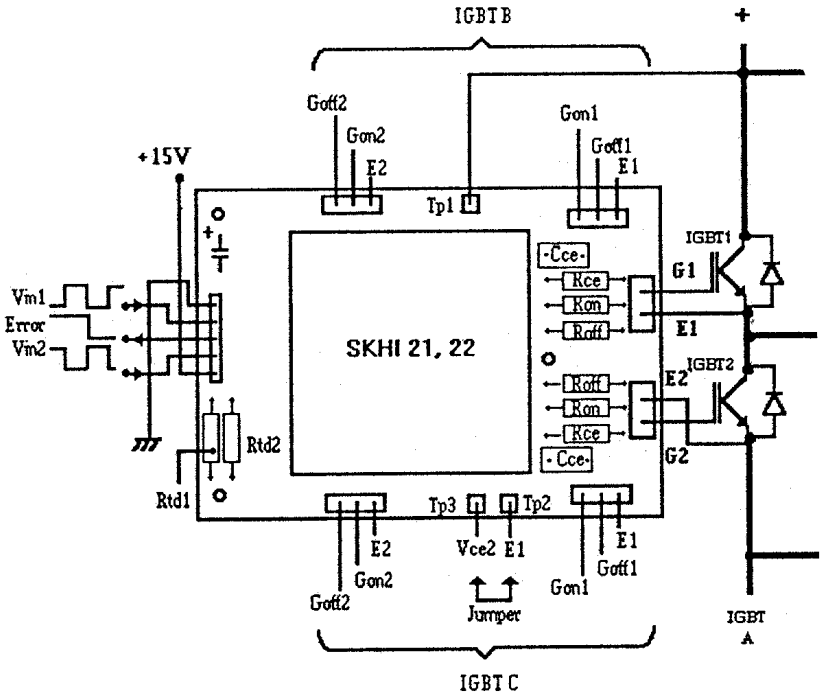

Fig. 2 Layout and connection to drive 1 IGBT DUAL module

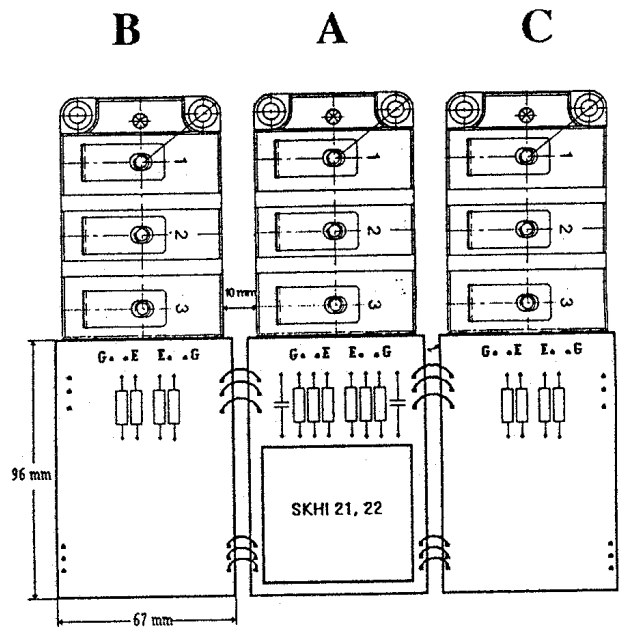

Fig. 3 One SKPC 2006 driving 3 DUAL modules SKM 200 GB 123 D via 2 slave boards

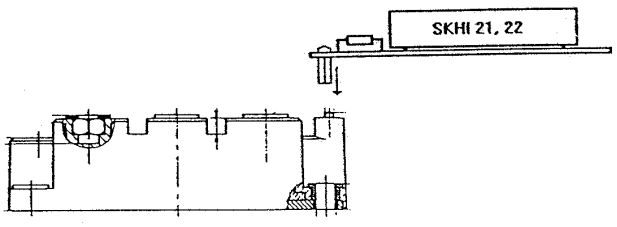

Fig. 4 SKPC 2006 fitting directly to the gate pins of SEMITRANS 3 (For SEMITRANS 2 use soft wiring to the gate connectors)

