

SKiiP® 2

6-pack - integrated intelligent Power System

6-pack
integrated gate driver

SKiiP 202GD061-357CTV

Gate driver features

- CMOS compatible inputs
- Wide range power supply
- Integrated circuitry to sense phase current, heat sink temperature and DC-bus voltage (option)
- Short circuit protection
- Over current protection
- Over voltage protection (option)
- Power supply protected against under voltage
- Interlock of top/bottom switch
- Isolation by transformers
- Fibre optic interface (option for GB-types only)
- IEC 68T.1 (climate) 25/85/56 (SKiiP® 2 gate driver)

Absolute Maximum Ratings			
Symbol	Conditions	Values	Units
V_{S1}	stabilized 15 V power supply	18	V
V_{S2}	unstabilized 24 V power supply	30	V
V_{iH}	input signal voltage (high)	15 + 0,3	V
dv/dt	secondary to primary side	75	kV/μs
V_{isolIO}	input / output (AC, r.m.s., 2s)	2500	Vac
V_{isol12}	output 1 / output 2 (AC, r.m.s., 2s)	1500	Vac
f_{max}	switching frequency	20	kHz
$T_{op} (T_{stg})$	operating / storage temperature	- 25 ... + 85	°C

Characteristics				(T _a = 25 °C)	
Symbol	Conditions	min.	typ.	max.	Units
V_{S1}	supply voltage stabilized	14,4	15	15,6	V
V_{S2}	supply voltage non stabilized	20	24	30	V
I_{S1}	$V_{S1} = 15$ V	$340+240 \cdot f/f_{max} + 3,5 \cdot (I_{AC}/A)$			mA
I_{S2}	$V_{S2} = 24$ V	$250+170 \cdot f/f_{max} + 2,6 \cdot (I_{AC}/A)$			mA
V_{iT+}	input threshold voltage (High)	11,2			V
V_{iT-}	input threshold voltage (Low)	5,4			V
R_{IN}	input resistance	10			kΩ
$t_{d(on)IO}$	input-output turn-on propagation time	1,1			μs
$t_{d(off)IO}$	input-output turn-off propagation time	1,4			μs
$t_{pERRRESET}$	error memory reset time	9			μs
t_{TD}	top / bottom switch : interlock time	2,3			μs
$I_{analogOUT}$	8 V corresponds to max. current of 15 V supply voltage (available when supplied with 24 V)	200			A
$I_{Vs1outmax}$	output current at pin 13/20/22/24/26	50			mA
I_{A0max}	logic low output voltage	5			mA
V_{0L}	logic low output voltage	0,6			V
V_{0H}	logic high output voltage	30			V
I_{TRIPSC}	over current trip level (I _{analog OUT} = 10 V)	250			A
I_{TRIPLG}	ground fault protection	58			A
T_{tp}	over temperature protection	110			°C
$U_{DCTRIPO}$	trip level of U _{DC} -protection (U _{analog OUT} = 9 V); (option)	400			V

For electrical and thermal design support please use SEMISEL.
Access to SEMISEL is via SEMIKRON website <http://www.semikron.com>.

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

