

QA

DC-DC Converter for IGBT Driver



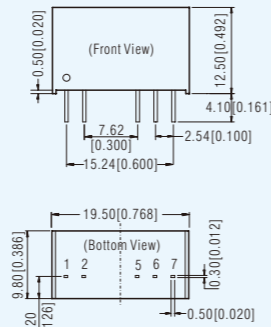
Features

- Operating temperature: -40°C~ +105°C
- Isolation: 3000VAC
- Ultra-low capacitance
- No-load-operation allowed
- Continuous short circuit protection, self-recovery
- Ultra-miniature SIP package

Product Program

Model Number	Input Voltage (VDC)	Input Voltage Range (VDC)	Positive Output (VDC)	Negative Output (VDC)	Output current (mA)	Efficiency	Isolation (VAC)
QA01	15	14.5-15.5	+15	-8.7	+80/-40	80%	3000
QA01-09	15	14.5-15.5	+9	/	+111	80%	3000
QA01-A09	15	14.5-15.5	+9	-9	+55/-55	80%	3000
QA01-17	15	14.5-15.5	+17	-8.7	+80/-40	80%	3000
QA02	12	11.6-12.4	+15	-8.7	+80/-40	80%	3000
QA03	24	23.3-24.7	+15	-8.7	+80/-40	80%	3000
QA04	12	9-15	+15	-8	+100/-80	80%	3000

Package Dimension LxWxH: 19.50x9.80x12.50(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
*5	-Vo
6	OV
7	+Vo

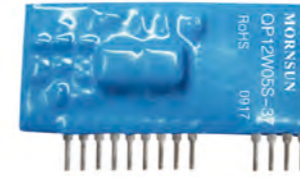
*QA01-09 has no connection.

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

RoHS

QP12W05S-37 & QP12W05S-37A

Hybrid Integrated IGBT Driver



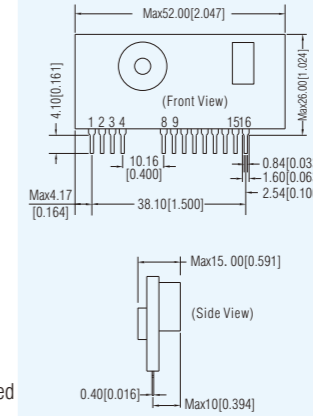
Features

- Built-in high CMRR opto-coupler (CMR:Typical: 30kV/μs, Min:15kV/μs)
- Single power supply
- Built-in DC-DC isolation power supply
- CMOS & TTL compatible with input signal
- High isolated voltage optocoupler (3750V_{RMS}/min)
- Short circuit and fault output function
- Output will soft cut-off when over-current occurs
- Input signal will be blocked and reset regularly after fault protection is triggered
- Adjustable controlled time of detect short circuit
- Switching frequency up to 20kHz

Product Program

Model Number	Supply Voltage VCC(VDC)	Gate Voltage	Output Peak Current	Switching Frequency (Max)	Driving Channel	Isolation
QP12W05S-37	15	+15V/-8V	±5000mA	20KHz	1	3750VAC
QP12W05S-37A	12	+15V/-8V	±5000mA	20KHz	1	3750VAC

Package Dimension LxWxH: 52.00x25.00x15.00(mm)



Pin-Out

Pin	Function
1	Power supply+
2	Power supply-
3	Drive signal input+
4	Drive signal input-
8	DC/DC converter output+
9	DC/DC converter output(COM)
10	DC/DC converter output-
11	Drive output
12	Collector of internal power tube
13	Detect of short circuit
14	Adjustment of Soft turn-off time
15	Fault signal output
16	Adjustment of short-circuit detection time delay

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.30[±0.012]

QAW01 & QAW02

2:1 Wide Input Voltage DC-DC converter for IGBT Driver



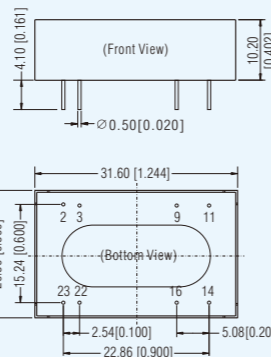
Features

- Operating temperature: -40°C~ +85°C
- Derating temperature up to 71°C
- Isolation: 3000VDC
- Output over voltage protection
- Continuous short circuit protection, self-recovery
- DIP24 package

Product Program

Model Number	Input Voltage (VDC)	Input Voltage Range (VDC)	Positive Output (VDC)	Negative Output (VDC)	Output current (mA)	Efficiency	Isolation (VAC)
QAW01	12	9-18	+15	-9	±200	85%	3000
QAW02	24	18-36	+15	-9	±200	85%	3000

Package Dimension LxWxH: 31.60x20.30x10.20(mm)



Pin-Out

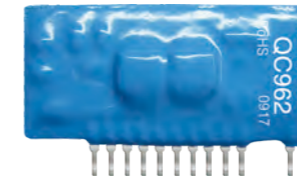
Pin	Function
2,3	GND
9	OV
11	-Vo
14	+Vo
16	OV
22,23	Vin

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.01]

RoHS

QC962

Hybrid Integrated IGBT Driver



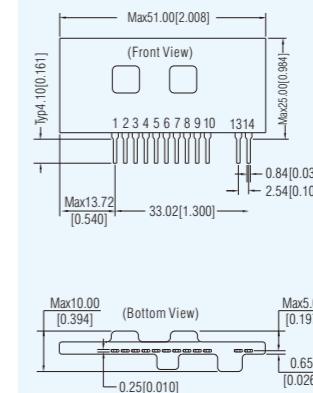
Features

- Built-in high CMRR opto-coupler (CMR:Typical: 30kV/μs, Min:15kV/μs)
- Two power supply
- CMOS & TTL compatible with input signal
- High isolated voltage optocoupler(3750V_{RMS}/min)
- Short circuit and fault output function
- Output will soft cut-off when over-current occurs
- Adjustable controlled time of detect short circuit
- Switching frequency up to 20kHz
- Can drive 600V/600A, 1200V/400A, 1700V/200A series of IGBT converter
- Pin and characteristic are compatible with M57962AL
- Optional pin thickening product can through the vibration test

Product Program

Model Number	Supply Voltage VCC(VDC)	Supply Voltage VEE(VDC)	Gate Voltage	Output Peak Current	Switching Frequency (Max)	Driving Channel	Isolation
QC962	15	-10	+15V/-9V	±5000mA	20KHz	1	3750VAC
QC962-8A	15	-10	+15V/-9V	±8000mA	40KHz	1	3750VAC

Package Dimension LxWxH: 51.00x25.00x10.00(mm)



Pin-Out

Pin	Function
1	Fault detect
2	Reaction time
4	Power supply+
5	Drive output
6	Power supply-
8	Fault signal output
13	Drive signal input-
14	Drive signal input+
3,7,9,10	NC

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.30[±0.012]