

1781 Quad Modules

SPECIFICATIONS

Discrete I/O Modules

DC input quad modules

INPUT	IB5Q	IT5Q	Units
Nominal Input Voltage	24	24	Vdc
Maximum Input Voltage	32	32	Vdc
Minimum Input Voltage	3.3	3.3	Vdc
Input Resistance	1	1	K Ω
Drop Out Current	1.0	1.0	mA dc
Maximum Input Current*	32	32	mA dc
Allowable Off-state Input	1.0	1.0	mA dc
Allowable Off-state Voltage	2.0	2.0	V dc
Maximum Turn-on Time	300	30	μ sec
Maximum Turn-off Time	600	600	μ sec

* @ maximum input voltage

OUTPUT	IB5Q	IT5Q	Units
Nominal Logic Supply Voltage	5	5	V dc
Minimum Logic Voltage	4.5	4.5	V dc
Maximum Logic Voltage	6.0	6.0	V dc
Typical Logic Supply Current*	10	10	mA dc
Maximum Logic Supply Current**	14.5	14.5	mA dc
Max. Logic Supply Leakage Current**	20	20	μ A dc
Maximum Output Voltage	30	30	V dc
Maximum Output Current	50	50	mA dc
Maximum Output Leakage Current**	20	20	μ A dc
Maximum Output Voltage Drop†	200	200	mV dc

* @ nominal voltage

** @ maximum logic voltage

† @ maximum output current

General specifications

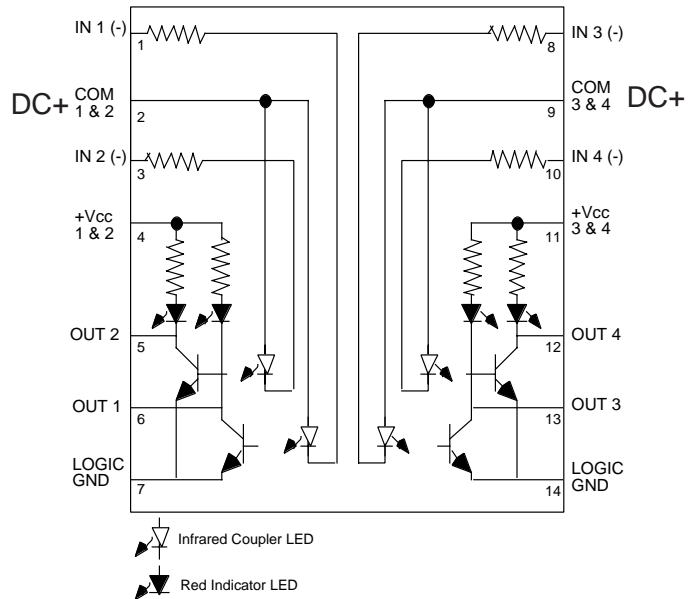
Operating temperature range	-30 to +80°C
Storage temperature range	-40 to +100°C
Isolation	4,000 V rms
Capacitance input to output	8 pF

* @nominal input voltage

Application notes

- Do not install or remove modules in live (electrically hot) circuits. High voltage may be present.
- Input connections are polarized.
- The controlled voltage on the output pins (out 1,2,3, and 4) cannot exceed 3 V dc higher than +Vcc. This is a limitation of the reverse breakdown voltage of the status indicator LED's.
- An externally located diode (forward biased) can be installed in series with the +Vcc 1 & 2 pin (pin 4) or +Vcc 3 & 4 (pin 11) of the module to extend the output control voltage to a maximum of 30 V dc. An externally located diode (forward biased) can be installed in series with the + terminal of a quad backplane to extend the output control voltage to a maximum of 30 V dc.

1781-IB5Q



1781-IT5Q

