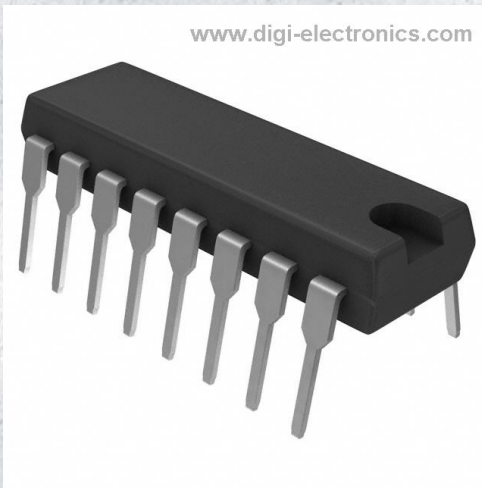


ILQ2G Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	ILQ2G-DG
Manufacturer	Isocom Components 2004 LTD
Manufacturer Product Number	ILQ2G
Description	16PIN TRANSISTOR DETECTOR, HIGH
Detailed Description	Optoisolator Transistor Output 5300Vrms 1 Channel 16-DIP

This model ILQ2G is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

ILQ2G

Series:

ILQ

Number of Channels:

1

Current Transfer Ratio (Min):

100% @ 10mA

Turn On / Turn Off Time (Typ):

-

Input Type:

DC

Voltage - Output (Max):

70V

Voltage - Forward (Vf) (Typ):

1.2V

Vce Saturation (Max):

400mV

Mounting Type:

Through Hole

Supplier Device Package:

16-DIP

Manufacturer:

Isocom Components 2004 LTD

Product Status:

Active

Voltage - Isolation:

5300Vrms

Current Transfer Ratio (Max):

500% @ 10mA

Rise / Fall Time (Typ):

2µs, 2µs

Output Type:

Transistor

Current - Output / Channel:

50mA

Current - DC Forward (If) (Max):

50 mA

Operating Temperature:

-25°C ~ 100°C

Package / Case:

16-DIP (0.400", 10.16mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.49.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



IL1, IL2, IL5, IL74
ILD1, ILD2, ILD5, ILD74
ILQ1, ILQ2, ILQ5, ILQ74

HIGH DENSITY PHOTOTRANSISTOR OPTICALLY COUPLED ISOLATORS



APPROVALS

- UL recognised, File No. E91231
 IL* Package Code " GG "
 ILD*/ILQ* Package Code " FF "

'X' SPECIFICATION APPROVALS

Add 'X' after part number

- VDE 0884 in 3 available lead form : -
 - STD
 - G form
 - SMD approved to CECC 00802

DESCRIPTION

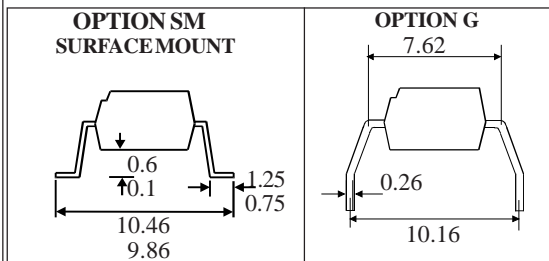
The IL*, ILD*, ILQ* series of optically coupled isolators consist of infrared light emitting diodes and NPN silicon photo transistors in space efficient dual in line plastic packages.

FEATURES

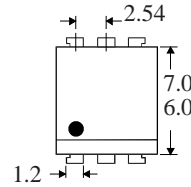
- Options :-
 10mm lead spread - add G after part no.
 Surface mount - add SM after part no.
 Tape&reel - add SMT&R after part no.
- Three package types
- High Current Transfer Ratio (50% min)
- High Isolation Voltage (5.3kV_{RMS}, 7.5kV_{PK})
- High BV_{CEO} (70V min)
- IL2, ILD2, ILQ2, IL5, ILD5, ILQ5

APPLICATIONS

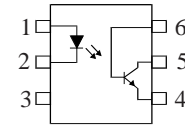
- Computer terminals
- Industrial systems controllers
- Measuring instruments
- Signal transmission between systems of different potentials and impedances



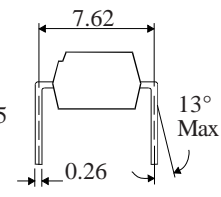
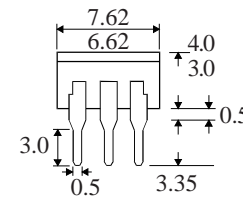
IL1
IL2
IL5
IL74



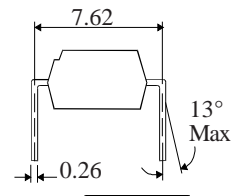
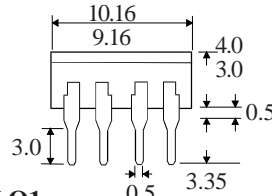
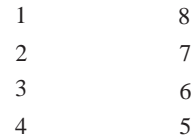
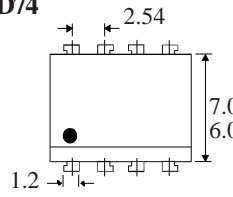
Dimensions in mm



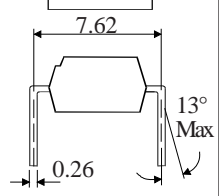
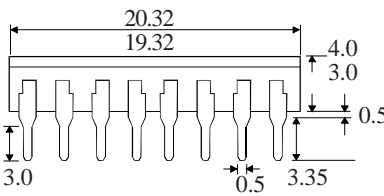
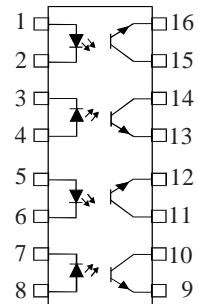
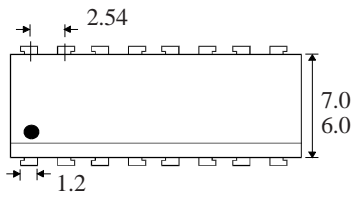
ILD1
ILD2
ILD5
ILD74



ILQ1
ILQ2
ILQ5
ILQ74



ILQ1
ILQ2
ILQ5
ILQ74



ISOCOM COMPONENTS 2004 LTD
 Unit 25B, Park View Road West,
 Park View Industrial Estate, Brenda Road
 Hartlepool, Cleveland, TS25 1UD
 Tel: (01429) 863609 Fax: (01429) 863581

ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature	-40°C to +125°C
Operating Temperature	-25°C to +100°C
Lead Soldering Temperature (1/16 inch (1.6mm) from case for 10 secs)	260°C

INPUT DIODE

Forward Current	50mA
Reverse Voltage	6V
Power Dissipation	70mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV_{CEO} IL2,ILD2,ILQ2,IL5,ILD5,ILQ5	70V
IL1,ILD1,ILQ1,IL74,ILD74,ILQ74	50V
Emitter-collector Voltage BV_{ECO}	6V
Collector Current	50mA
Power Dissipation	150mW

POWER DISSIPATION

Total Power Dissipation	170mW
(derate linearly 2.67mW/°C above 25°C)	

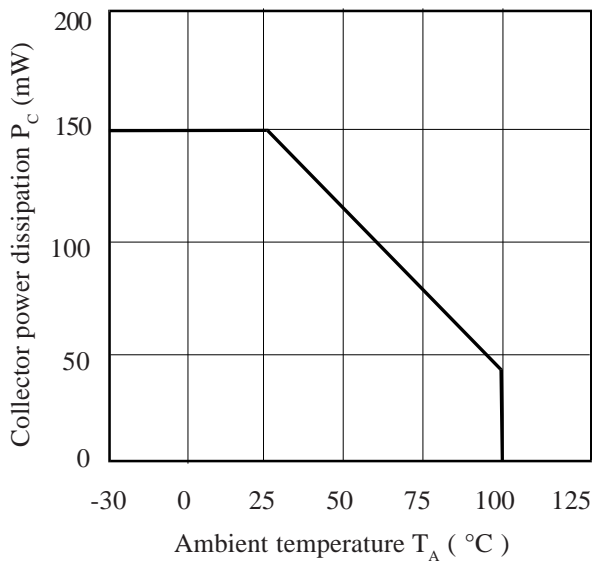
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F) Reverse Current (I_R)		1.2	1.65 10	V μA	$I_F = 50\text{mA}$ $V_R = 4\text{V}$
Output	Collector-emitter Breakdown (BV_{CEO}) IL2,ILD2,ILQ2,IL5,ILD5,ILQ5 IL1,ILD1,ILQ1,IL74,ILD74,ILQ74 Emitter-collector Breakdown (BV_{ECO}) Collector-emitter Dark Current (I_{CEO})	70 50 6			V V V nA	$I_C = 1\text{mA}$, (Note 2) $I_C = 1\text{mA}$, (Note 2) $I_E = 100\mu\text{A}$ $V_{CE} = 10\text{V}$
Coupled	Current Transfer Ratio (CTR) (Note 2) IL1,ILD1,ILQ1 IL2,ILD2,ILQ2 IL5,ILD5,ILQ5 IL74,ILD74,ILQ74 Saturated Current Transfer Ratio IL1,ILD1,ILQ1 IL2,ILD2,ILQ2 IL5,ILD5,ILQ5 IL74,ILD74,ILQ74 Collector-emitter Saturation Voltage, $V_{CE(SAT)}$ Input to Output Isolation Voltage V_{ISO} Input to Output Isolation Voltage V_{ISO} Input-output Isolation Resistance R_{ISO} Output Rise Time tr Output Fall Time tf	20 100 50 12.5 12.5 5300 7500 5×10^{10}	75 170 100	300 500 400 0.4	% % % % V V_{RMS} V_{PK} Ω μs μs	$10\text{mA } I_F, 10\text{V } V_{CE}$ $10\text{mA } I_F, 10\text{V } V_{CE}$ $10\text{mA } I_F, 10\text{V } V_{CE}$ $16\text{mA } I_F, 5\text{V } V_{CE}$ $10\text{mA } I_F, 0.4\text{V } V_{CE}$ $10\text{mA } I_F, 0.4\text{V } V_{CE}$ $10\text{mA } I_F, 0.4\text{V } V_{CE}$ $16\text{mA } I_F, 0.5\text{V } V_{CE}$ $16\text{mA } I_F, 2\text{mA } I_C$ See note 1 See note 1 $V_{IO} = 500\text{V}$ (note 1) $I_F = 10\text{mA}$ $V_{CC} = 5\text{V}, R_L = 75\Omega$

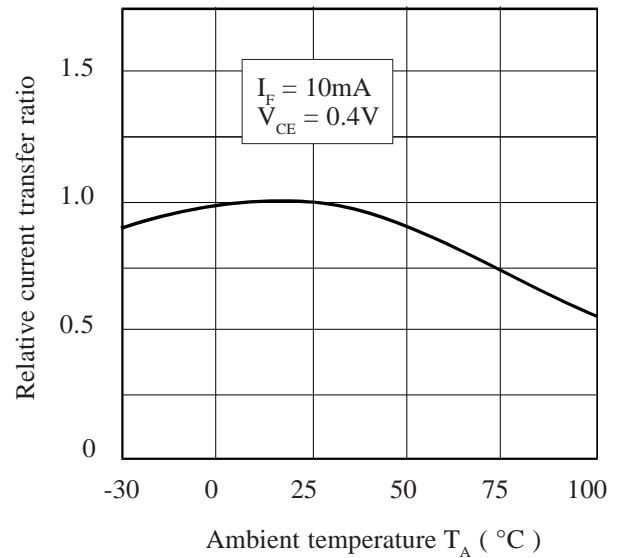
Note 1 Measured with input leads shorted together and output leads shorted together.

Note 2 Special Selections are available on request. Please consult the factory.

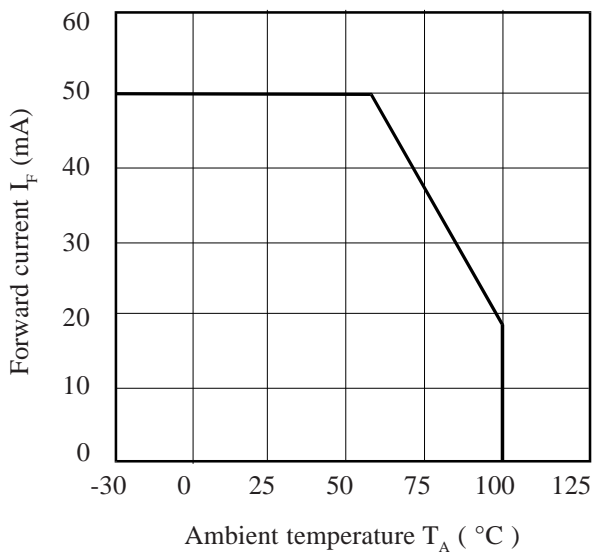
Collector Power Dissipation vs. Ambient Temperature



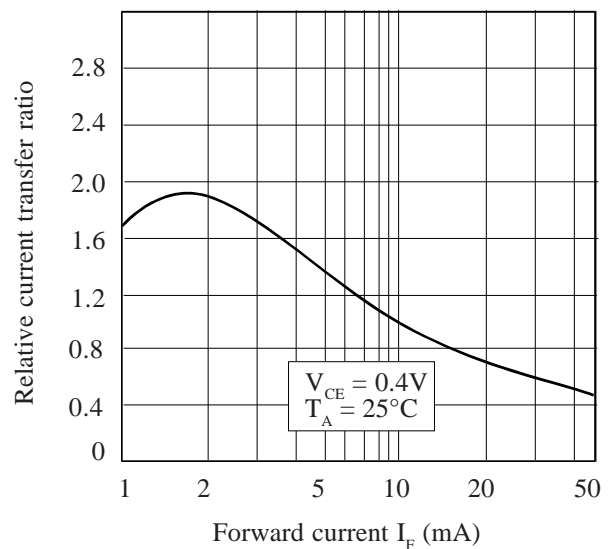
Relative Current Transfer Ratio vs. Ambient Temperature



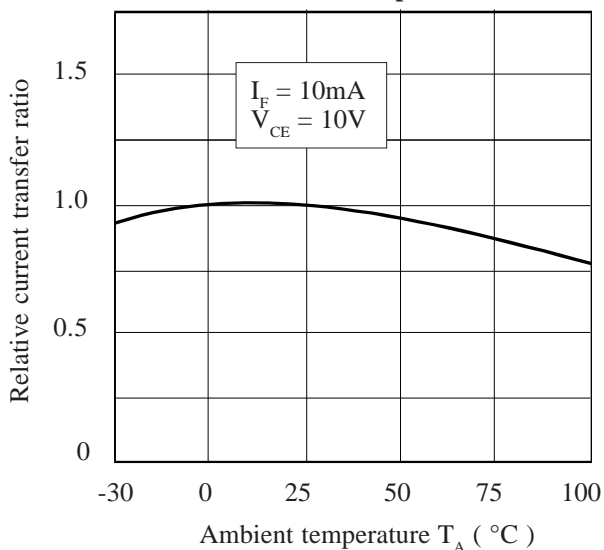
Forward Current vs. Ambient Temperature



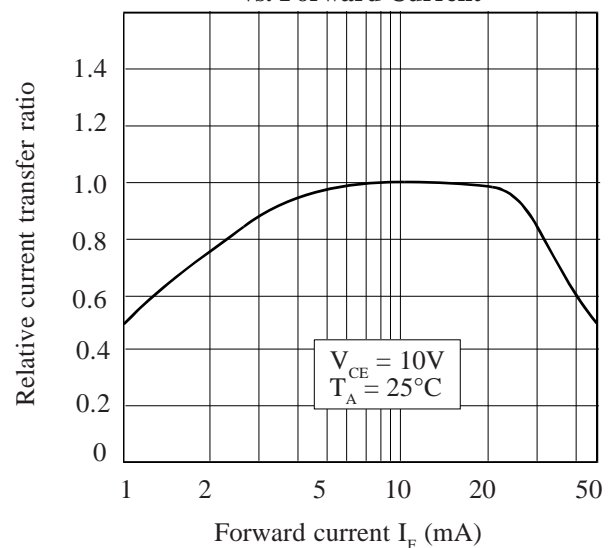
Relative Current Transfer Ratio vs. Forward Current



Relative Current Transfer Ratio vs. Ambient Temperature



Relative Current Transfer Ratio vs. Forward Current



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