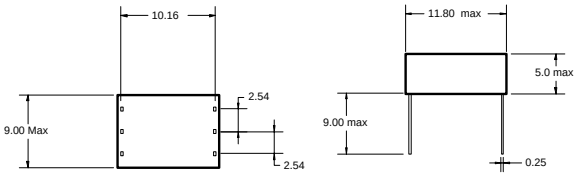
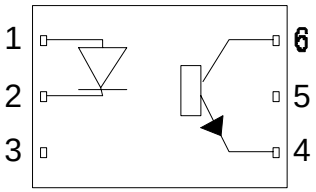
CNW84
TRANSISTOR
OPTOCOUPLERS

ISOCOM® LTD

PACKAGES	CIRCUIT
	

DESCRIPTION

The CNW84 is an optically coupled isolator. It consists of a Gallium Arsenide infrared emitting diode and a NPN silicon phototransistor mounted in a standard 6-pin plastic dual-in-line package, .It has a wide body encapsulation with a pin distance of 10.16mm. Suffix G.

Isocom Ltd supplies a multitude of plastic optocouplers for all applications varying from standard transistor optos through to Darlington and Schmitt Trigger devices. It's massive family of optos vary in speed allowing maximum opportunity to engineers worldwide.

All devices are performance guaranteed between -20ºC and +80ºC and have completed rigorous testing. The Company's customers can be assured of our commitment to stringent quality, reliability and inspection standards, as demonstrated by our existing approvals. Other customer specific options can also be offered.

FEATURES

- 8000V Isolation
- 8mm (min) Creeping Distance between Emitter & Detector Leads
- Designed for VDE and British Standards Applications
- Internal seperation of min 2mm

For sales enquiries, or further information, please contact our sales office at:
Isocom Ltd, Hutton Close, Crowther Industrial Estate, District 3, Washington, NE38 0AH
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Or go to the Isocom Website @: Http://www.isocom.uk.com

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-55°C to +150°C
Operating Temperature	-55°C to +100°C
Lead Soldering Temperature	260°C 1.6mm from case for 10S
Input-to-Output Isolation Voltage	⇧8000VDC

Input Diode

Forward DC Current	50mA	
Reverse DC Voltage	5V	
Peak forward Current	3A	1µS p.w. 300 pps
Power Dissipation	200mW	Derate linearly above 25°C at 1.33mW/°C.

Output Transistor

Collector-Emitter Voltage	50V	BV_{CEO}
Emitter-collector voltage	7V	BV_{ECO}
Power Dissipation	300mW	Derate linearly above 25°C at 2.0mW/°C

ELECTRICAL CHARACTERISTICS

T_A = 25°C U.O.S. (each channel where appropriate).

Input Diode Electrical Characteristics

Parameter	Symbol	Test Conditions	Device	Min	Typ	Max	Units
Forward Voltage	V_F	I_F = 10mA		0.8		1.5	V
Reverse Current	I_R	V_R= 5.0V				10	µA
Output Detector Electrical Characteristics							
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = 1mA		50			V
Collector-base Voltage	BV_{ECO}	I_C= 100µA		7.0			V
Collector-emitter Dark Current	I_{CEO}	V_{CE}= 10V, I_F= 0				50	nA
Collector-emitter Capacitance	C_{CE}	V_{CE}= 10V, f= 1Mhz			2.0		pF
Coupled Electrical Characteristics							
DC Current Transfer Ratio	I_C/I_F	I_F = 10mA, V_{CE} = 5V		60	100		%
DC Current Transfer Ratio	I_C/I_F	I_F = 1.0mA, V_{CE} = 5V		30			%
Input-to-Output Isolation Resistance	R_{ISO}	V_{IO}= 500V		10^{11}			Ω
Collector-Emitter Saturation Voltage	$V_{CE(Sat)}$	I_F= 20mA, I_C= 2mA				0.4	V
Capacitance Input to Output	C_{IO}	f= 1Mhz				0.5	pF
Turn-on Time	T_{ON}	V_{CC}= 10V, I_C= 2mA, R_L= 100Ω				15	µS
Turn-off Time	T_{OFF}					15	µS
Input-to-Output Isolation Voltage				8000			V

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