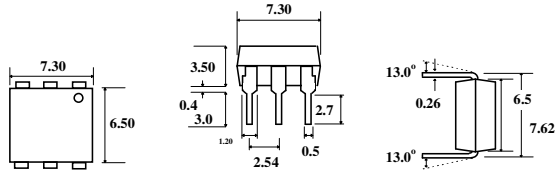
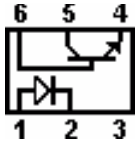
CNY17-1-2-3
TRANSISTOR
OPTOCOUPLERS

ISOCOM® LTD

PACKAGES	CIRCUIT
	

DESCRIPTION

The CNY17-1 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.

Isocom Ltd supplies a multitude of plastic optocouplers for all applications varying from standard transistor optocouplers through to Darlington and Schmitt Trigger devices. Its massive family of optocouplers 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

4400V Isolation
CTR Min 40%
Compact Dual un Line Package
UL Approval E250824

For sales enquiries, or further information, please contact our sales office at:
Isocom Ltd, Hutton Close, Crowther Industrial Estate, District 3, Washington, NE38 0AH
Tel: +44 0191 4166 546 Fax: +44 0191 4155 055 Email sales@isocom.uk.com
Or go to the Isocom Website @: Http://www.isocom.uk.com

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-55°C to +125°C
Operating Temperature	-30°C to +100°C
Lead Soldering Temperature	260°C 1.6mm from case for 10S
Input-to-Output Isolation Voltage	⇧5000VDC for 1 min

Input Diode

Forward DC Current	50mA	
Reverse DC Voltage	6V	
Peak forward Current	1A	1µS p.w. 300 pps
Power Dissipation	70mW	

Output Transistor

Collector-Emitter Voltage	60V	BV_{CEO}
Emitter-collector voltage	6V	BV_{ECO}
Collector Current	50mA	
Collector Power Dissipation	150mW	

ELECTRICAL CHARACTERISTICS

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

Input Diode Electrical Characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Forward Voltage	V_F	I_F = 20mA		1.2	1.4	V
Peak Forward Voltage	V_{FM}	I_{FM}= 0.5A			3.5	V
Reverse Current	I_R	V_R= 4.0V			10	µA
Terminal Capacitance	C_T	V= 0, f= 1Khz		30		pF

Output Detector Electrical Characteristics

Collector Dark Current	I_{CEO}	V_{CE}= 20V, I_F= 0			10^{-7}	A

Coupled Electrical Characteristics

DC Current Transfer Ratio	CTR	I_F = 2mA, V_{CE} = 5V	40		160	%
Collector-Emitter Saturation Voltage	$V_{CE(Sat)}$	I_F= 20mA, I_C= 1mA		0.1	0.3	V
Input-to-Output Isolation Resistance	R_{ISO}	V_{IO}= 500V	$5*10^{11}$	10^{11}		Ω
Floating Capacitance	C_F	V= 0, f= 1Mhz		0.6	1.0	pF
Cut Off Frequency	F_C	V_{CE}= 5V, I_C= 2mA, R_L= 100Ω		80		KHz
Responce Time (Rise)	T_R	V_{CC}= 5V, I_C= 2mA, R_L= 100Ω		5	20	µS
Responce Time (Fall)	T_F			4	20	µS
Input-to-Output Isolation Voltage			4400			V

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