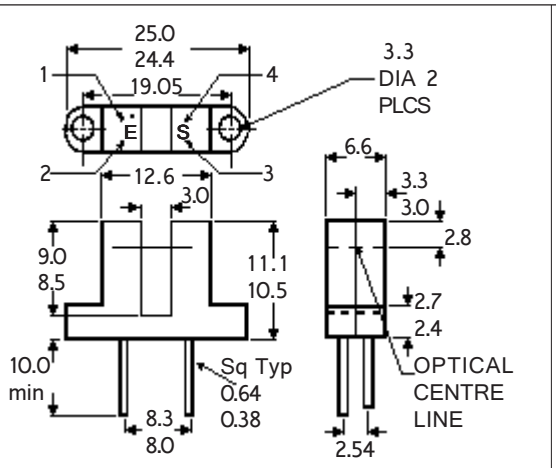
H21A1, H21A2, H21A3,
H22A1, H22A2, H22A3,

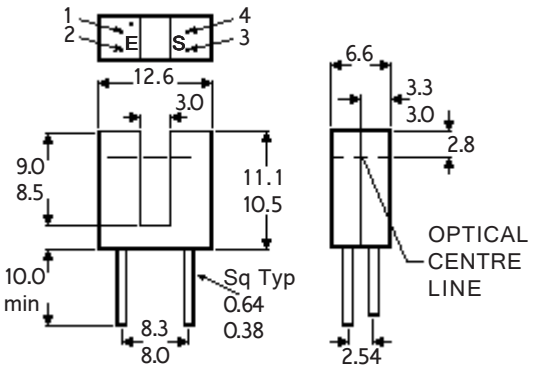
ISOCOM COMPONENTS

ROHS COMPLIANT

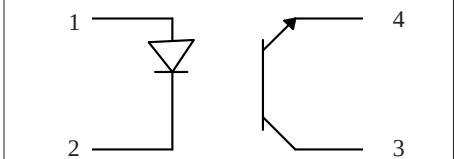
1mm APERTURE OPTO-ELECTRONIC SINGLE CHANNEL SLOTTED INTERRUPTER SWITCHES WITH TRANSISTOR SENSORS

Dimensions in mm





H21A Type
Device will be Marked " H21A "



H22A Type
Device will be Marked " H22A "

DESCRIPTION

The H21A_ and H22A_ series of opaque photointerrupters are single channel switches consisting of a Gallium Arsenide infrared emitting diode and a NPN silicon photo transistor mounted in a polycarbonate housing. The package is designed to optimise the mechanical resolution, coupling efficiency, ambient light rejection, cost and reliability. Operating on the principle that objects opaque to infrared will interrupt the transmission of light between an infrared emitting diode and a photo sensor switching the output from an "ON" state to an "OFF" state.

FEATURES

- High Gain
- 3mm Gap between LED and Detector
- Polycarbonate case protected against ambient light

APPLICATIONS

- Copiers, Printers, Facsimilies, Record Players, Casette Decks, Optoelectronic Switches

ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature	-40°C to + 85°C
Operating Temperature	-25°C to + 85°C
Lead Soldering Temperature (1/16 inch (1.6mm) from case for 10 secs)	260°C

INPUT DIODE

Forward Current	50mA
Reverse Voltage	5V
Power Dissipation	75mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV_{CEO}	30V
Emitter-collector Voltage BV_{ECO}	5V
Collector Current I_C	20mA
Power Dissipation	75mW

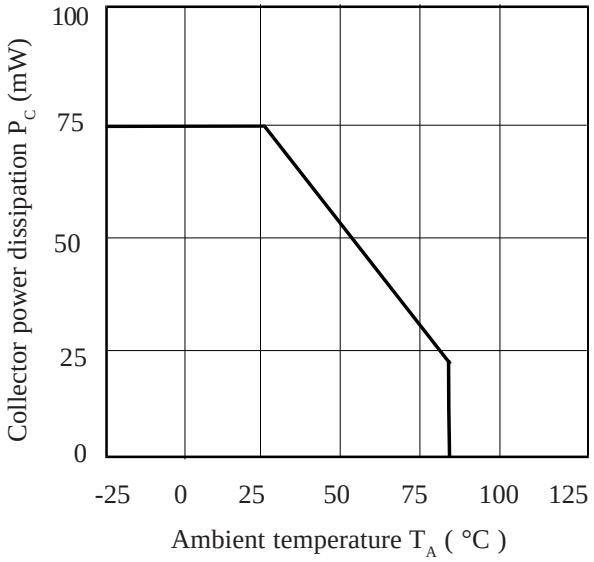
ISOCOM COMPONENTS LTD
Unit 25B, Park View Road West,
Park View Industrial Estate, Brenda Road
Hartlepool, TS25 1YD England Tel: (01429)863609
Fax : (01429) 863581 e-mail sales@isocom.co.uk
http://www.isocom.com

ELECTRICAL CHARACTERISTICS (T_A= 25°C Unless otherwise noted)

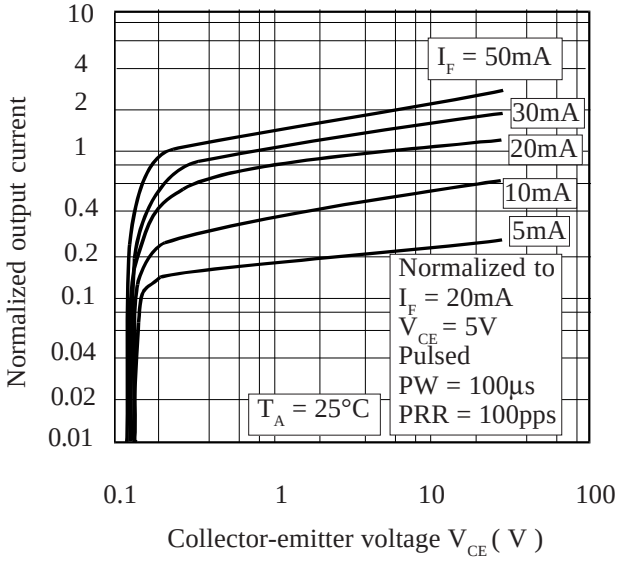
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.7	V	I_F = 50mA
	Reverse Voltage (V_R)	5			V	I_R = 100µA
	Reverse Current (I_R)			100	µA	V_R = 5V
Output	Collector-emitter Breakdown (BV_{CEO})	30			V	I_C = 1mA
	Emitter-collector Breakdown (BV_{ECO})	5			V	I_E = 100µA
	Collector-emitter Dark Current (I_{CEO})			100	nA	V_{CE} = 10V
Coupled	On-State Collector Current I_C ($_{ON}$) (Note 1)					
	H21A1, H22A1	0.15			mA	5mA I_F, 5V V_{CE}
		1.0			mA	20mA I_F, 5V V_{CE}
		1.9			mA	30mA I_F, 5V V_{CE}
	H21A2, H22A2	0.3			mA	5mA I_F, 5V V_{CE}
		2.0			mA	20mA I_F, 5V V_{CE}
		3.0			mA	30mA I_F, 5V V_{CE}
	H21A3, H22A3	0.6			mA	5mA I_F, 5V V_{CE}
		4.0			mA	20mA I_F, 5V V_{CE}
		5.5			mA	30mA I_F, 5V V_{CE}
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$					
	H21A2, 3, H22A2, 3			0.4	V	20mA I_F, 1.8mA I_C
	H21A1, H22A1			0.4	V	30mA I_F, 1.8mA I_C
	Turn-on Time ton		8		µs	V_{CC} = 5V ,
	Turn-off Time toff		50		µs	I_F = 30mA, R_L = 2.5kΩ

Note 1 Special Selections are available on request. Please consult the factory.

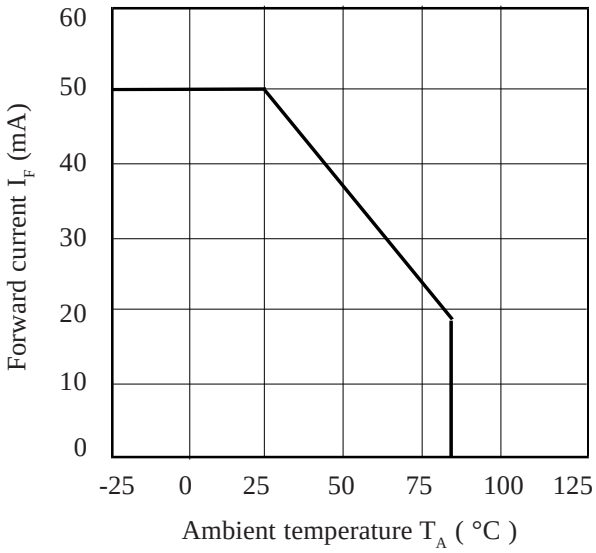
Collector Power Dissipation vs. Ambient Temperature



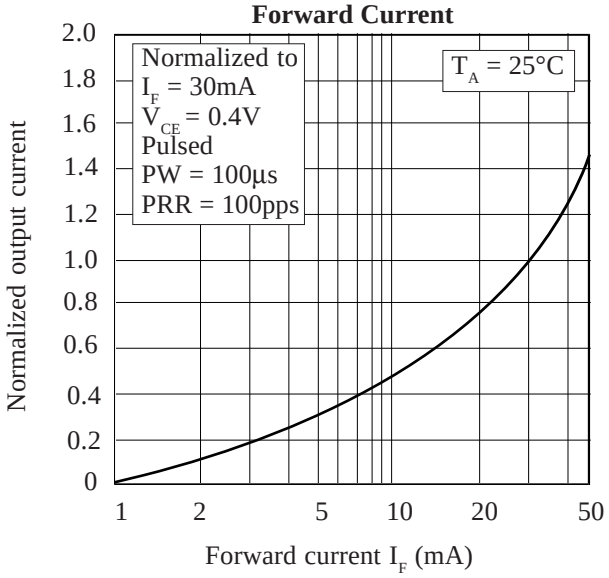
Normalized Output Current vs. Collector-emitter Voltage



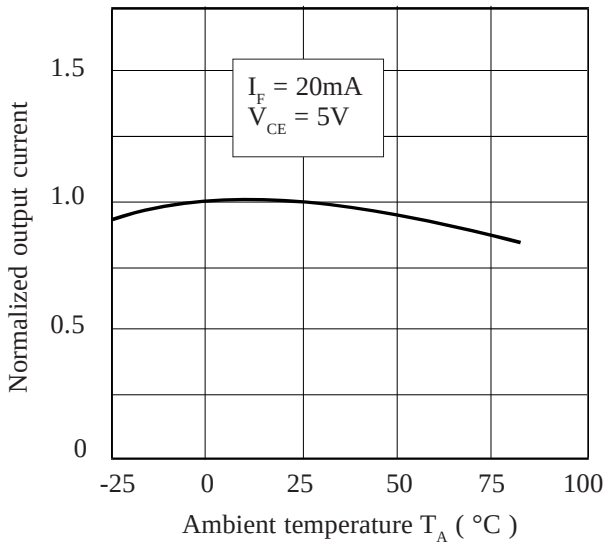
Forward Current vs. Ambient Temperature



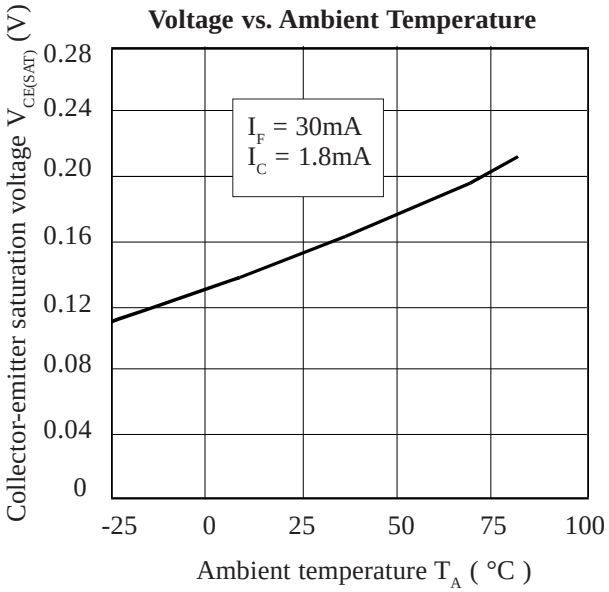
Normalized Output Current vs. Forward Current



Normalized Output Current vs. Ambient Temperature



Collector-emitter Saturation Voltage vs. Ambient Temperature



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Optical Switches, Transmissive, Phototransistor Output ***category:***

Click to view products by Isocom ***manufacturer:***

Other Similar products are found below :

LTH-301-23 LTH-306-02 LTH-306-64 E3C-X2C E3S-LS20B4S1 E3SX2CE4 EESPW301 EE-SX872R EE-SX952-R 3M RPI-0125B RPI-2501 RPI-576A KRA021 LTH-306-04M HOA0865-100 HOA1961-055 RPI-124 E3F-3C4 EE-SPX305-W2A 2M EE-SX953-W 3M EE-SX972P-C1 LTH-306-01 EE-SX670B EE-SX771R 5M RPI-574 ZGY1602(ITR) EESX677C1JR01M EESX971PC1 HOA1883-501 EE-SX970P-C1 EE-SX976-C1 RPI-125 RPI-243 EE-SX1061 EE-SX675P-WR 1M EE-SX971-C1 OPB806 OPB853A3 GP1S396HCP0F EE-SX1128 OPB857Z EE-SV3-B EE-SJ3-D RPI-0226 ITR8307 EE-SX671P-WR 1M EE-SX675P EE-SX951P-W 1M EE-SX672R EE-SX954P-W 1M