

H11AV1X, H11AV2X, H11AV3X
H11AV1, H11AV2, H11AV3



ISOCOM
COMPONENTS



**OPTICALLY COUPLED
ISOLATOR
PHOTOTRANSISTOR OUTPUT**

APPROVALS

- UL recognised, File No. E91231
Package System " GG "
- 'X' SPECIFICATION APPROVALS
 - VDE 0884 in 3 available lead form : -
 - STD
 - G form
 - SMD approved to CECC 00802
- Certified to EN60950 by
Nemko - Certificate No. P01102464

DESCRIPTION

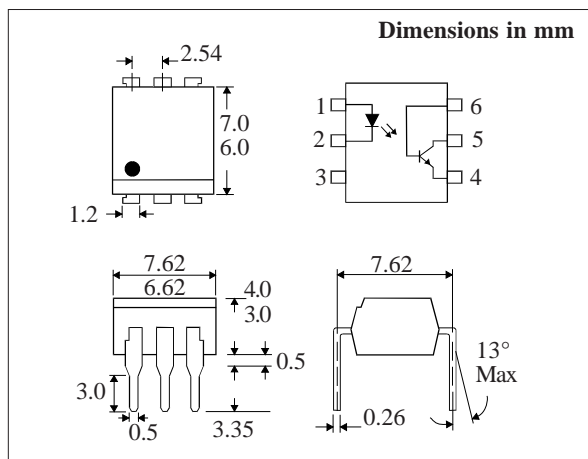
The H11AV series of optically coupled isolators consist of infrared light emitting diode and NPN silicon photo transistor in a standard 6 pin dual in line plastic package.

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.
- High Isolation Voltage (5.3kV_{RMS}, 7.5kV_{PK})
- High BV_{CEO} (70V min)
- All electrical parameters 100% tested
- Custom electrical selections available

APPLICATIONS

- DC motor controllers
- Industrial systems controllers
- Measuring instruments
- Signal transmission between systems of different potentials and impedances



**ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)**

Storage Temperature _____ -55°C to +150°C
 Operating Temperature _____ -55°C to +100°C
 Lead Soldering Temperature
 (1/16 inch (1.6mm) from case for 10 secs) 260°C

INPUT DIODE

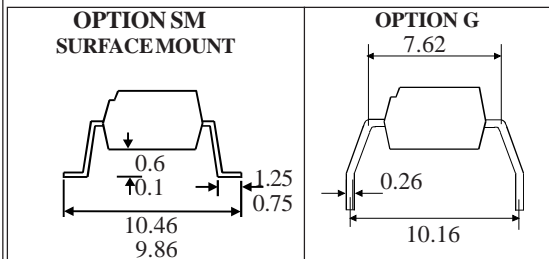
Forward Current _____ 60mA
 Reverse Voltage _____ 6V
 Power Dissipation _____ 105mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV_{CEO} _____ 70V
 Collector-base Voltage BV_{CBO} _____ 70V
 Emitter-collector Voltage BV_{ECO} _____ 6V
 Collector Current _____ 50mA
 Power Dissipation _____ 160mW

POWER DISSIPATION

Total Power Dissipation _____ 200mW
 (derate linearly 2.67mW/°C above 25°C)



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

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

PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.5	V	$I_F = 10\text{mA}$
	Reverse Current (I_R)			10	μA	$V_R = 6\text{V}$
Output	Collector-emitter Breakdown (BV_{CEO}) (note 2)	70			V	$I_C = 1\text{mA}$
	Collector-base Breakdown (BV_{CBO})	70			V	$I_C = 100\mu\text{A}$
	Emitter-collector Breakdown (BV_{ECO})	6			V	$I_E = 100\mu\text{A}$
	Collector-emitter Dark Current (I_{CEO})			50	nA	$V_{CE} = 10\text{V}$
Coupled	Current Transfer Ratio (CTR) H11AV1	100		300	%	$10\text{mA } I_F, 10\text{V } V_{CE}$
	H11AV2	50			%	$10\text{mA } I_F, 10\text{V } V_{CE}$
	H11AV3	20			%	$10\text{mA } I_F, 10\text{V } V_{CE}$
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$			0.4	V	$20\text{mA } I_F, 2\text{mA } I_C$
	Input to Output Isolation Voltage V_{ISO}	5300 7500			V_{RMS} V_{PK}	See note 1 See note 1
	Input-output Isolation Resistance R_{ISO}	5×10^{10}			Ω	$V_{IO} = 500\text{V}$ (note 1)
	Rise Time, tr Fall Time, tf		2 2		μs μs	$V_{CC} = 5\text{V}$, fig 1 $I_F = 10\text{mA}, R_L = 75\Omega$

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.

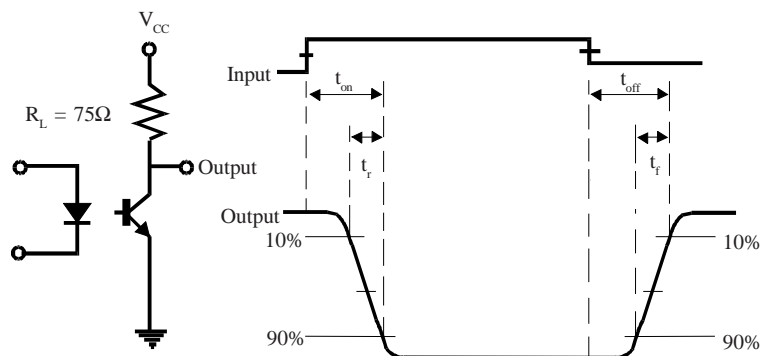
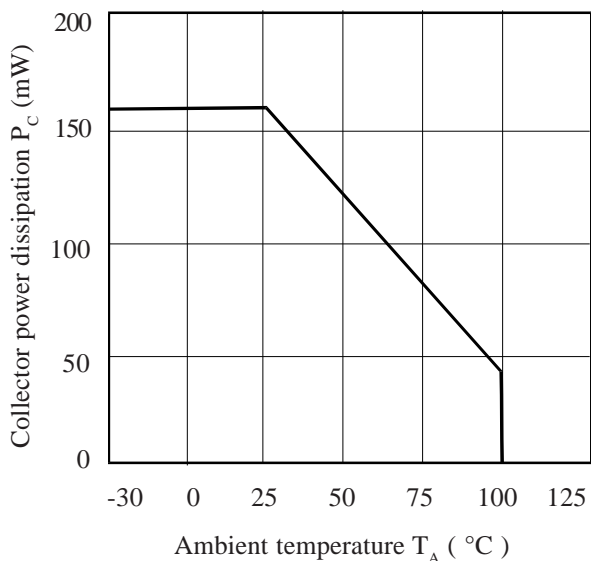
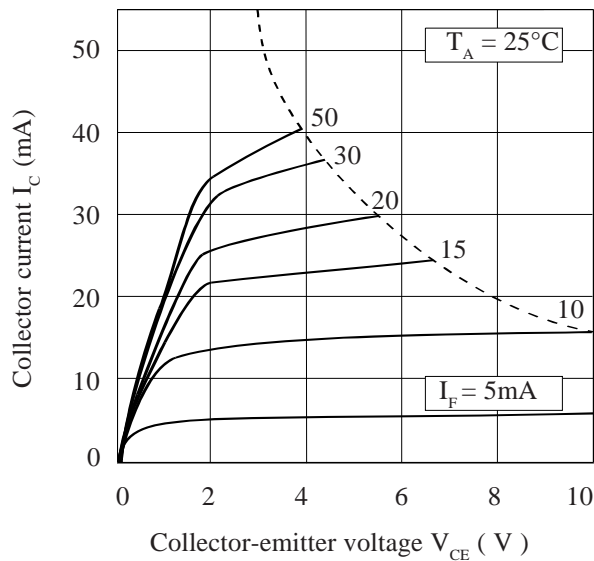


FIG 1

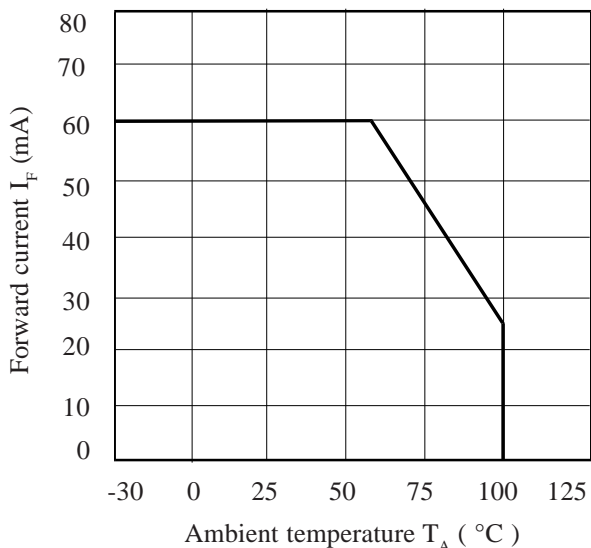
Collector Power Dissipation vs. Ambient Temperature



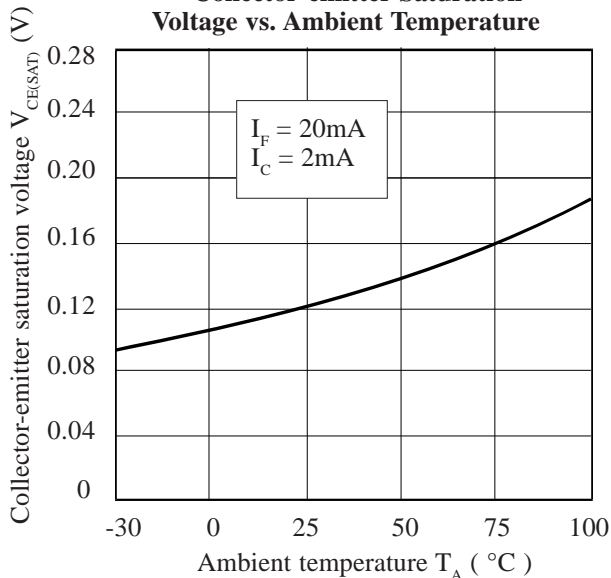
Collector Current vs. Collector-emitter Voltage



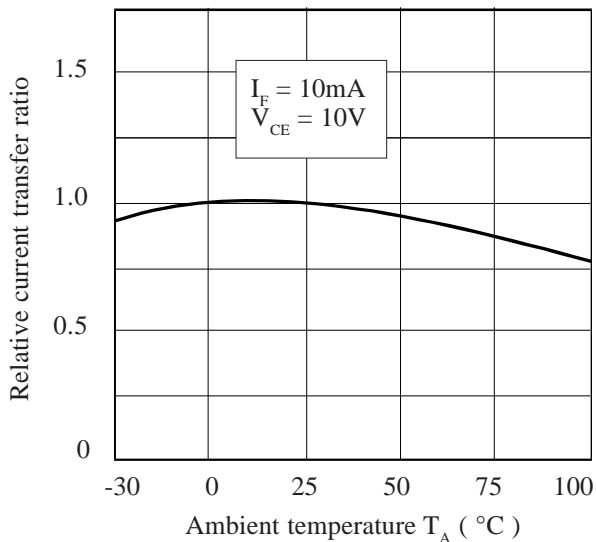
Forward Current vs. Ambient Temperature



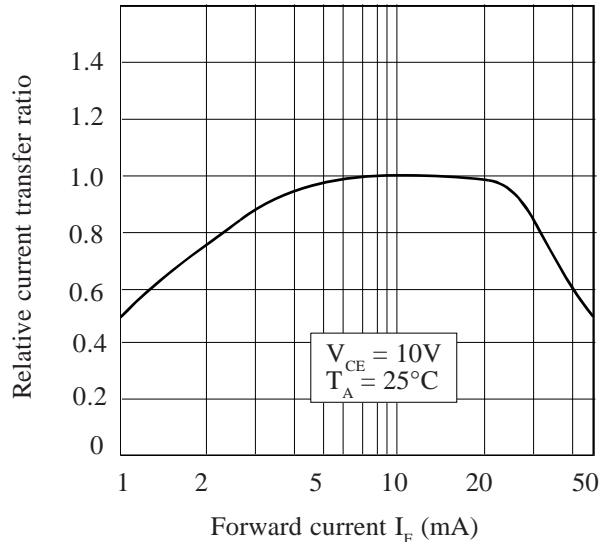
Collector-emitter Saturation Voltage vs. Ambient Temperature



Relative Current Transfer Ratio vs. Ambient Temperature



Relative Current Transfer Ratio vs. Forward Current



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET Output Optocouplers](#) category:

Click to view products by [Isocom](#) manufacturer:

Other Similar products are found below :

[TLP3131\(F\)](#) [TLP598GAF](#) [CPC2014NTR](#) [TLP4026G\(F\)](#) [LTV-817S-B](#) [CPC2017NTR](#) [TLP152\(TPL,E\(T](#) [PS2505L-4-E3-A](#) [TLP3106A\(TP,F](#)
[TLP3107A\(F](#) [TLP3106A\(F](#) [TLP4176A\(F](#) [TLP3149\(F](#) [TLP3147\(F](#) [TLP3145\(F](#) [TLP3146\(F](#) [TLP3149\(TP,F](#) [H11AV1XSM](#) [CNY17-1-000E](#)
[CNY17-1-300E](#) [CNY17-1S](#) [CNY17-2-000E](#) [CNY17-2S](#) [CNY173SR2VM](#) [CNY17-4-000E](#) [HCPL-181-06DE](#) [HCPL-J312-000E](#) [LTV-3120S-](#)
[TA1](#) [LTV-817-L](#) [LTV-817M-D](#) [LTV-817S-A](#) [LTV-817S-TA1-L](#) [TIL111](#) [TIL191](#) [MCT6X](#) [MCT6XSM](#) [TLP170A\(F\)](#) [TLP170G\(F\)](#)
[TLP197GA\(F\)](#) [TLP197G\(TP,F\)](#) [TLP222A-2\(LF1,F\)](#) [TLP291\(GR-TP.E\(O](#) [TLP597A\(F\)](#) [TLP797J\(F\)](#) [4N35X](#) [4N35XSM](#) [MOC213M](#)
[HMHA2801R2](#) [ILD1XSM](#) [ILQ2X](#)