Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

PS2502-1X, PS2502-2X, PS2502-4X
PS2502-1, PS2502-2, PS2502-4

ISOCOM COMPONENTS

ROHS COMPLIANT

HIGH DENSITY MOUNTING PHOTODARLINGTON OPTICALLY COUPLED ISOLATORS

APPROVALS

- UL recognised, File No. E91231

'X' SPECIFICATION APPROVALS

- VDE 0884 in 3 available lead form : -
  - STD
  - G form
  - SMD approved to CECC 00802
- Certified to EN60950 by the following Test Bodies :-
  Nemko - Certificate No. P01102465
  Fimko - Certificate No. FI18162
  Semko - Reference No. 0202041/01-25
  Demko - Certificate No. 311161-01
- BSI approved - Certificate No. 8001

DESCRIPTION

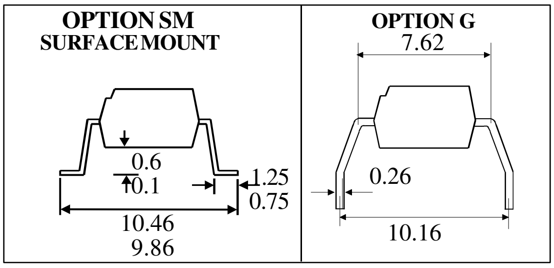
The PS2502-1, PS2502-2, PS2502-4 series of optically coupled isolators consist of infrared light emitting diodes and NPN silicon photodarlingtons in space efficient dual in line plastic packages.

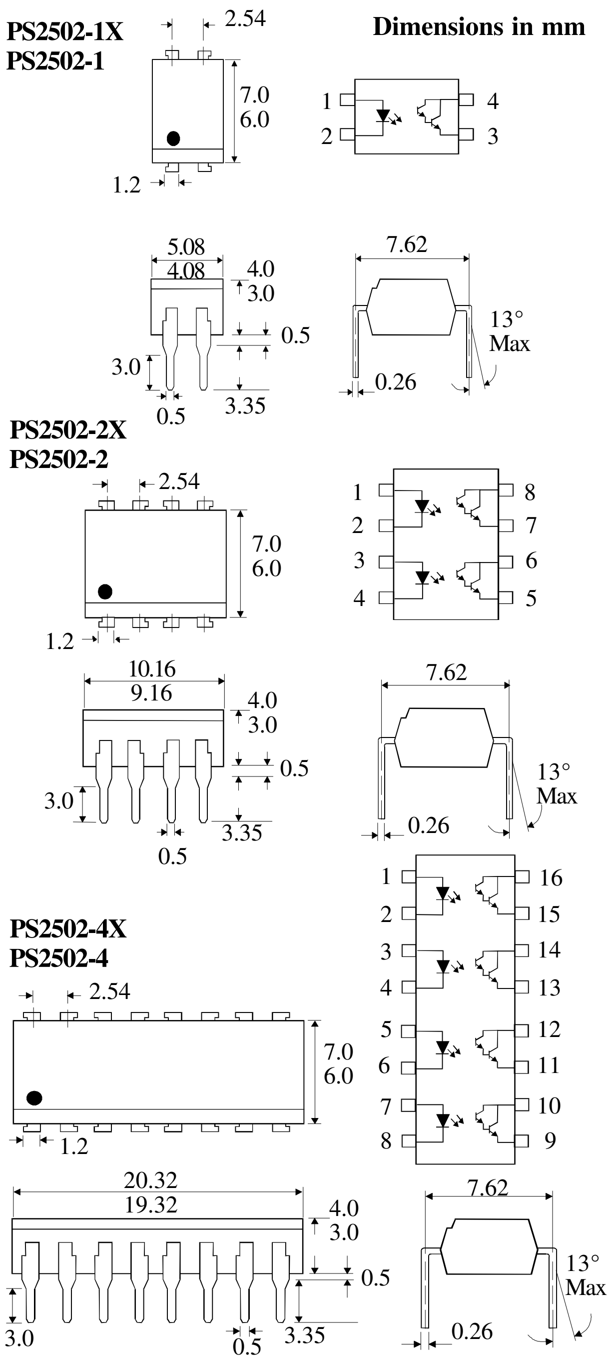
FEATURES

- Options :-
  10mm lead spread - add G after part no.
  Surface mount - add SM after part no.
  Tape&reel - add SMT&R after part no.
- High Current Transfer Ratio (200%min)
- High Isolation Voltage ($5.3kV_{RMS}$, $7.5kV_{PK}$)
- All electrical parameters 100% tested
- Custom electrical selections available

APPLICATIONS

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





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

ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature	-55°C to + 125°C
Operating Temperature	-30°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}	40V
Emitter-collector Voltage BV_{ECO}	6V
Power Dissipation	150mW

POWER DISSIPATION

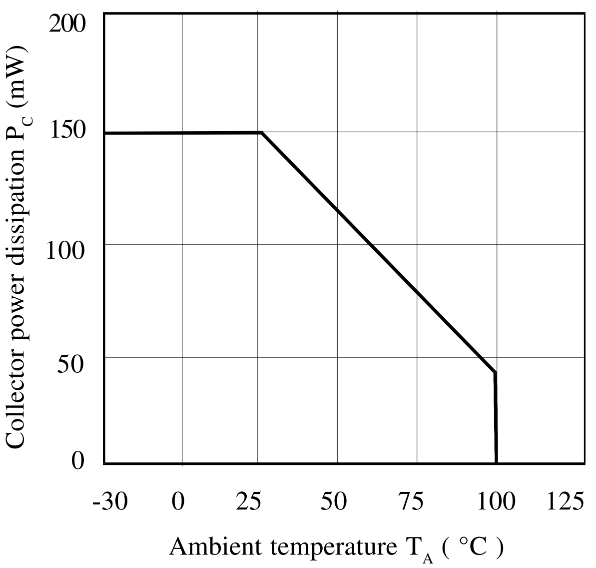
Total Power Dissipation (derate linearly 2.67mW/°C above 25°C)	200mW

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

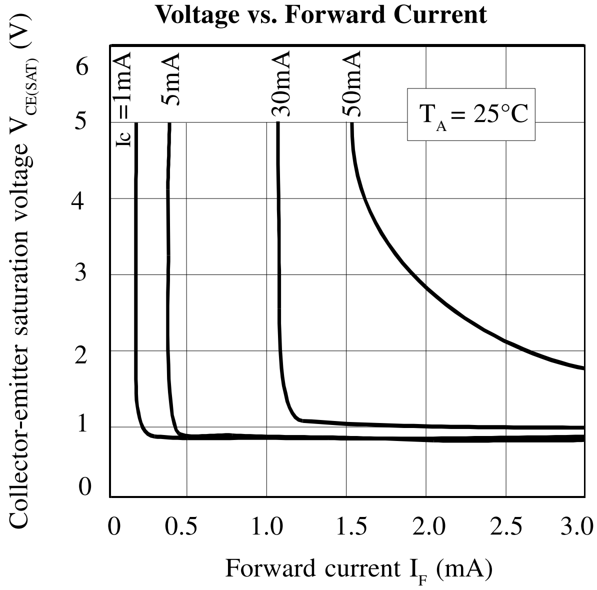
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	I_F = 10mA
	Reverse Current (I_R)			10	µA	V_R =4V
Output	Collector-emitter Breakdown (BV_{CEO}) (Note 2)	40			V	I_C =0.5mA
	Emitter-collector Breakdown (BV_{ECO})	6			V	I_E = 100µA
Coupled	Current Transfer Ratio (CTR) (Note 2)	200	2000		%	1mA I_F, 2V V_{CE}
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$			1.0	V	1mA I_F, 2mA 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}	$5x10^{10}$			Ω	V_{IO} = 500V (note 1)
	Output Rise Time tr Output Fall Time tf		60 53	300 250	µs µs	V_{CE} = 2V, I_C = 10mA, R_L = 100Ω

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.

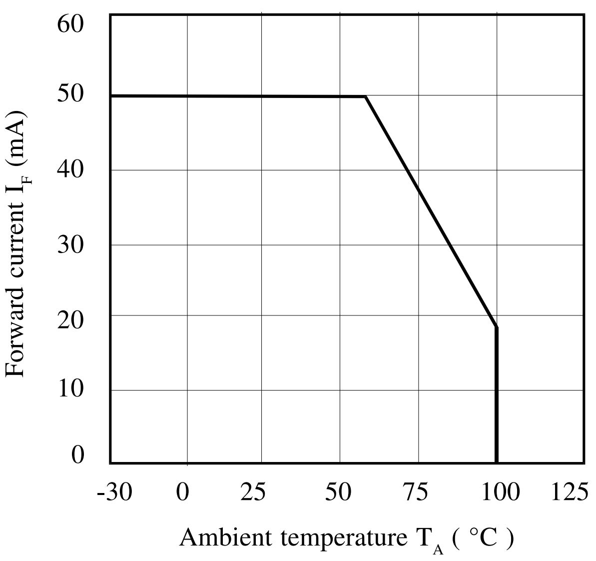
Collector Power Dissipation vs. Ambient Temperature



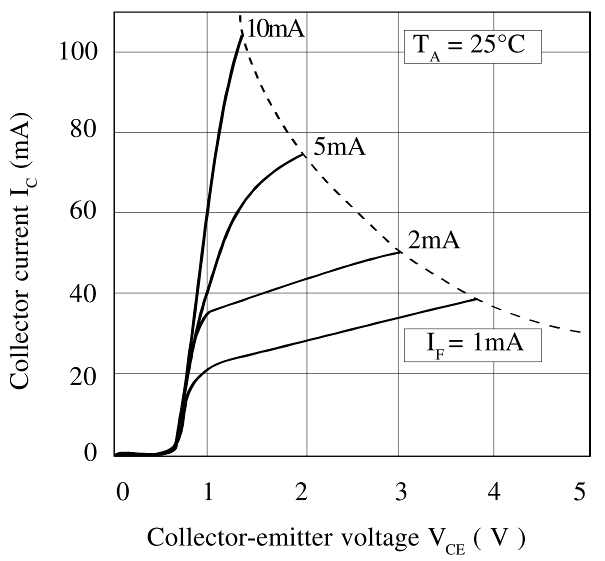
Collector-emitter Saturation Voltage vs. Forward Current



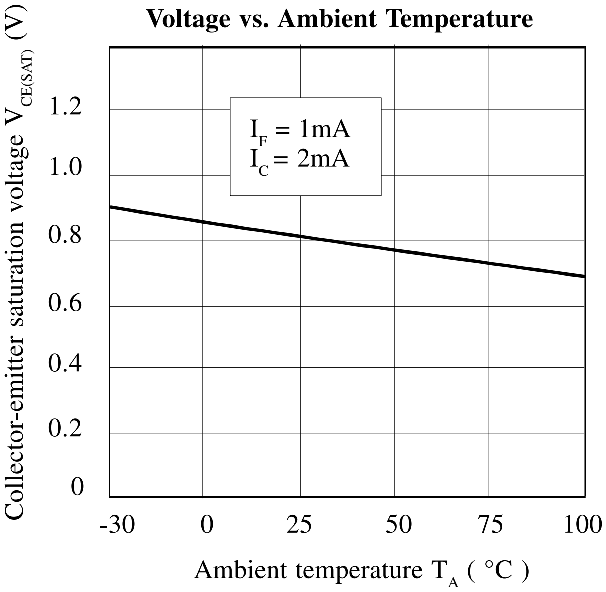
Forward Current vs. Ambient Temperature



Collector Current vs. Collector-emitter Voltage



Collector-emitter Saturation Voltage vs. Ambient Temperature



Relative Current Transfer Ratio vs. Ambient Temperature