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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IS2701-1

HIGH DENSITY MOUNTING PHOTOTRANSISTOR OPTICALLY COUPLED ISOLATORS

ISOCOM COMPONENTS

ROHS COMPLIANT

DESCRIPTION

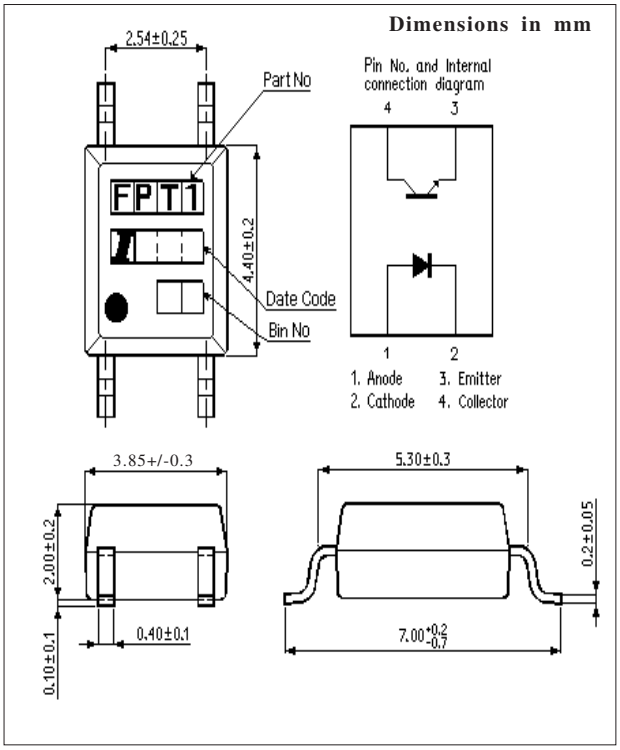
The IS2701-1 is an optically coupled isolator consisting of an infrared light emitting diode and NPN silicon photo transistor in a space efficient dual in line plastic package.

FEATURES

- Marked as FPT1.
- Current Transfer Ratio MIN. 50%
- Isolation Voltage ($3.75kV_{RMS}$, $5.3kV_{PK}$)
- All electrical parameters 100% tested
- Drop in replacement for NEC PS2701-1

APPLICATIONS

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



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

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	50mA
Reverse Voltage	6V
Power Dissipation	70mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV_{CEO}	80V
Emitter-collector Voltage BV_{ECO}	6V
Collector Current	50mA
Power Dissipation	150mW

POWER DISSIPATION

Total Power Dissipation	170mW
(derate linearly 2.26mW/°C above 25°C)	

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=20mA
	Reverse Current (I_R)			10	µA	V_R=4V
Output	Collector-emitter Breakdown (BV_{CEO})	80			V	I_C=0.1mA
	Emitter-collector Breakdown (BV_{ECO})	6			V	I_E=10µA
	Collector-emitter Dark Current (I_{CEO})			100	nA	V_{CE}=20V
Coupled	Current Transfer Ratio (CTR)	50		600	%	5mA I_F, 5V V_{CE}
	Optiional CTR Grades: IS2701-1A	80		160	%	5mA I_F, 5V V_{CE}
	IS2701-1B	130		260	%	5mA I_F, 5V V_{CE}
	IS2701-1C	200		400	%	5mA I_F, 5V V_{CE}
	IS2701-1D	300		600	%	5mA I_F, 5V V_{CE}
	IS2701-1BL	200			%	5mA I_F, 5V V_{CE}
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$			0.2	V	20mA I_F, 1mA I_C
	Input to Output Isolation Voltage V_{ISO}	3750		V_{RMS}		See note 1
		5300			V_{PK}	See note 1
	Input-output Isolation Resistance R_{ISO}	$5x10^{10}$			Ω	V_{IO}=500V (note 1)
	Output Rise Time tr		4	18	µs	V_{CE}=2V,
	Output Fall Time tf		3	18	µs	I_C=2mA, R_L=100Ω

Note 1 Measured with input leads shorted together and output leads shorted together.