imall

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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HIGH DENSITY MOUNTING PHOTODARLINGTON OPTICALLY COUPLED ISOLATORS



DESCRIPTION

The IS355 is an optically coupled isolator consisting of an infrared light emitting diode and NPN silicon photodarlington in a space efficient dual in line plastic package.

FEATURES

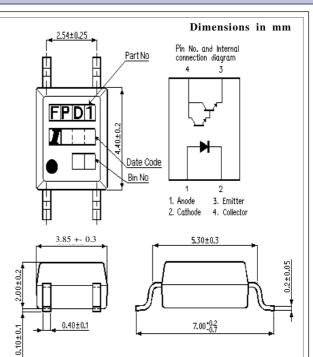
- Marked as FPD1.
- Current Transfer Ratio MIN. 600%
- Isolation Voltage $(3.75kV_{RMS}, 5.3kV_{PK})$ All electrical parameters 100% tested
- Drop in replacement for Sharp PC355

APPLICATIONS

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

impedances

29/8/07



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

DB928591-AAS/A5

ABSOLUTEMAXIMUMRATINGS (25°C unless otherwise specified)

Storage Temperature	-55° Cto+150°C
Operating Temperature	-55° C to $+100^{\circ}$ C
Lead Soldering Temperature	
(1/16 inch (1.6mm) from case for 1	0 secs) 260°C

INPUTDIODE

Forward Current	50mA
Reverse Voltage	6V
Power Dissipation	70mW

OUTPUTTRANSISTOR

Collector-emitter Voltage BV _{CEO}	35V
Emitter-collector Voltage BV _{ECO}	6V
Collector Current	80mA
Power Dissipation	150mW

POWER DISSIPATION

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

ELECTRICAL CHARACTERISTICS ($\rm T_{A}$ = 25°C Unless otherwise noted)

	PARAMETER	MIN	ТҮР	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	I _F =20mA
	Reverse Current (I_R)			10	μΑ	$V_R = 4V$
Output	Collector-emitter Breakdown (BV_{CEO})	35			v	$I_c = 0.1 \text{mA}$
	$\begin{array}{l} \mbox{Emitter-collector Breakdown} (BV_{\rm ECO}) \\ \mbox{Collector-emitter Dark Current} (I_{\rm CEO}) \end{array}$	6		1	V uA	$I_{E} = 10uA$ $V_{CE} = 10V$
Coupled	Current Transfer Ratio (CTR)	600		7500	%	$1 \text{mAI}_{\text{F}}, 2 \text{VV}_{\text{CE}}$
	Collector-emitter Saturation Voltage V _{CE(SAT)} Input to Output Isolation Voltage V _{ISO} Input-output Isolation Resistance R _{ISO} Output Rise Time tr Output Fall Time tf	3750 5300 5x10 ¹⁰	43	1 18 18	V V _{RMS} V _{PK} Ω μs μs	$20\text{mA I}_{F}, 1\text{mA I}_{C}$ See note 1 See note 1 $V_{IO} = 500V \text{ (note 1)}$ $V_{CE} = 2V,$ $I_{C} = 2\text{mA}, R_{I} = 100\Omega$
	w		-		ç	- <u>c</u> , - <u>L</u>

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