

PRODUCT SPECIFICATION

DATE:09/21/2005

cosmo ELECTRONICS CORPORATION	Photocoupler : KPC3571	NO.61P04026	PRELIMINARY
		SHEET 1 OF 4	

Mini-Flat package

High Reliability Photocoupler

Features

- 1.Low input current type ($I_F=1.0\text{mA}$).
- 2.Current transfer ratio (CTR : 50~400% at $I_F=1.0\text{mA}$ $V_{ce}=5\text{V}$).
- 3.High collector-emitter voltage($V_{ceo}:80\text{V}$).
- 4.High isolation voltage between input and output ($V_{iso}:3750\text{Vrms}$).
- 5.Opaque type mini-flat package.

Applications

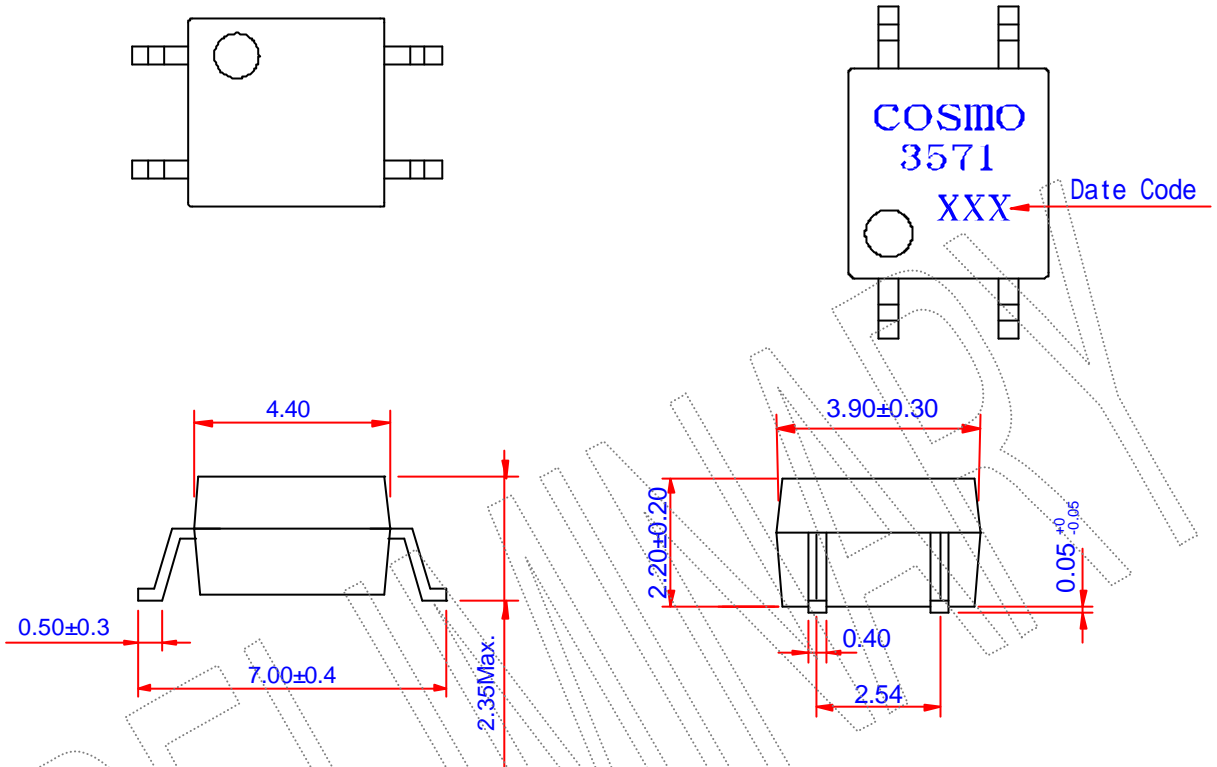
1. Computer terminals, programmable controllers.
2. Facsimile equipment, Audio, Video.
3. Communications, telephone, etc..

PRODUCT SPECIFICATION

DATE:09/21/2005

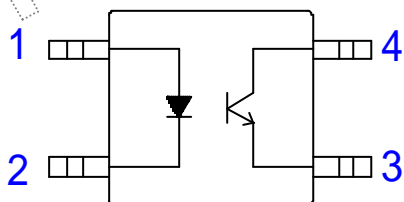
cosmo ELECTRONICS CORPORATION	Photocoupler : KPC3571	NO.61P04026	PRELIMINARY
		SHEET 2 OF 4	

1. OUTSIDE DIMENSION : UNIT (mm)



TOLERANCE : ±0.2mm

2. SCHEMATIC : TOP VIEW



1. Anode
2. Cathode
3. Emitter
4. Collector

PRODUCT SPECIFICATION

DATE: 09/21/2005

cosmo ELECTRONICS CORPORATION	Photocoupler : KPC3571	NO.61P04026	PRELIMINARY
		SHEET 3 OF 4	

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit	
Input	Forward current	I_F	10	mA
	Peak forward current	I_{FM}	200	mA
	Reverse voltage	V_R	6	V
	Power dissipation	P_D	15	mW
Output	Collector-emitter voltage	V_{CE0}	80	V
	Emitter-collector voltage	V_{ECO}	7	V
	Collector current	I_C	50	mA
	Collector power dissipation	P_C	150	mW
Total power dissipation	P_{tot}	170	mW	
Isolation voltage 1 minute	V_{iso}	3750	Vrms	
Operating temperature	T_{opr}	-30 to +115		
Storage temperature	T_{sta}	-55 to +125		
Soldering temperature 10 second	T_{sol}	260		

Electro-optical Characteristics

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V_{FM} $I_F=10mA$	-	1.2	1.4	V
	Reverse current	I_R $V_R=4V$	-	-	10	uA
	Terminal capacitance	C_t $V=0, f=1MHz$	-	30	250	pF
Output	Collector dark current	I_{CEO} $V_{CE}=50V, I_F=0$	-	-	100	nA
Transfer characteristics	Current transfer ratio	CTR $I_F=1.0mA, V_{CE}=5V$	50	-	400	%
	Collector-emitter saturation voltage	$V_{CE(sat)}$ $I_F=10mA, I_C=1mA$	-	-	0.2	V
	Isolation resistance	R_{iso} $DC500V, 40$ to $60\%RH$	5×10^{10}	1×10^{11}	-	ohm
	Floating capacitance	C_f $V=0, f=1MHz$	-	0.6	1.0	pF
	Response time (Rise)	t_r $V_{cc}=2V, I_C=2mA, R_L=100ohm$	-	4	18	us
	Response time (Fall)	t_f $V_{cc}=2V, I_C=2mA, R_L=100ohm$	-	3	18	us

PRODUCT SPECIFICATION

DATE: 09/21/2005

cosmo ELECTRONICS CORPORATION	Photocoupler : KPC3571	NO.61P04026	PRELIMINARY
		SHEET 4 OF 4	

NOTICE

The information contained in this document is a general product description and is subject to change without notice. Please contact cosmo in order to obtain the latest device data sheets before using any cosmo device. Cosmo does not assume any responsibility for use of any circuitry described. No circuit patent licenses are implied. This publication is the property of cosmo. No part of this publication may be reproduced or copied in any form or by any means, or transferred to any third party without the prior written consent of cosmo Electronics Corporation.

The devices listed in this document are designed for general applications only in electronic equipment. No devices shall be deployed which require higher level of reliability such as:

- Medical and other life support equipments.
- Space application.
- Telecommunication equipment (trunk lines).
- Nuclear power control equipment.

Unless it received prior written approval from cosmo.

cosmo takes no responsibility for damages arise form the improper usage of our device. Please contact cosmo for further information regarding the above notices.