



2004

New Product Info.



COSMO New Product Launch

KMOC308X, Photo Traic

冠西電子企業股份有限公司
COSMO Electronics Corporation.

WWW.COSMO-IC.COM

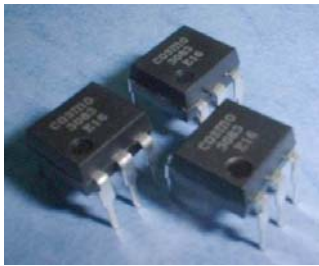
2004 .04

COSMO New Product

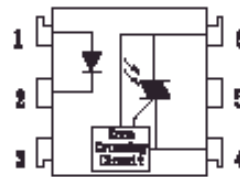
Photo Triac KMOC308X Series 800V

Released in Q2 2004

KMOC308X Series is COSMO new design photo triac with the function of 800V VDRM & Zero Crossing after 400V 600V series products which is very suitable for applying in SSR, SPS...etc.



Pin assignment



1. Anode
2. Cathode
3. NC
4. MAIN TERMINAL
5. SUBSTRATE DO NOT CONNECT
6. MAIN TERMINAL

- ❖ **Improve off-state output terminal voltage V_{DRM}**
- ❖ **Variety selections of trigger current I_{FT}**
- ❖ **$dv/dt=1000V/us$ custom-made**
- ❖ **Acquired safety approval UL, VDE, TUV, FIMKO, NEMKO, SEMKO**
- ❖ **Lead free production**

Package dimensions

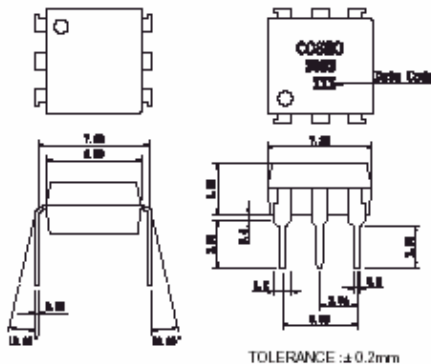


Photo Triac Product Family

DIP/SMD/H PackageType

KMOC308X

KMOC306X

KMOC305X

KMOC304X

KMOC302X

Mini Flat Type

KTLP161X

KTLP160X

Product Features

- ◆ High isolation voltage 5000Vrms
- ◆ High Off-state Output Terminal voltage $V_{DRM}=800V$
- ◆ Available package : DIP/SMD/H Type.
- ◆ Trigger current
 $I_{FT}=5mA$ (3083) , $10mA$ (3082) , $15mA$ (3081)
- ◆ On-state current $I_{TM}=300mA$

COSMO New Product

Photo Triac KMOC308X Series 800V

Application

- Solenoid/valve Controls
- Static Power Switches
- AC Motor Drives
- Temperature Controls
- AC Motor Starters
- E.M. Contactors
- Solid State Relay

Minimum trigger current (I_{FT})

Item	Max.	Unit
KMOC3081	15	mA
KMOC3082	10	
KMOC3083	5	

Electrical characteristics ($T_a=25^\circ\text{C}$)

Characteristic		Symbol	Rating	Unit
Input	Forward Current	I_F	50	mA
	Reverse Voltage	V_R	5	V
Output	Off-state output voltage	V_{DRM}	800	V
	Peak repetitive surge current	I_{TSM}	1	A
Operation Temperature		T_{opr}	-40~80	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40~125	$^\circ\text{C}$
Soldering Temperature		T_{sol}	260(10Sec)	$^\circ\text{C}$
Isolation voltage		V_{iso}	5000	V rms

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Forward current	V_F	$I_F=10\text{mA}$		1.2	1.5	V
Peak Blocking Current	I_{DRM}	$V_{DRM}=800\text{V}$		60	500	nA
On-state Voltage	V_{TM}	$I_{TM}=100\text{mA}$		1.8	3	V
Inhibit Voltage	V_{INH}	$I_F=5\text{mA}$		5	20	V
Critical rate of rise of OFF-state voltage	dv/dt		600	1000		V/uS



冠西電子企業股份有限公司
COSMO Electronics Corporation.

www.cosmo-ic.com

COSMO Electronics Crop.

8F, No.258, Lian Cheng Rd., Chung-Ho, Taipei
Hsien 235 Taiwan, R.O.C.

Tel:886-2-8227-1877 Fax:886-2-8227-1855

E-mail:sales@cosmo-ic.com

<http://www.cosmo-ic.com>

**COSMO Electronics (Hong Kong) International
Corp. Ltd. Shenzhen Representative**

Room 1506, Water Bldg, No.1019 Shennan Zhong Rd.,
Shenzhen. P.R. China

Tel: 86-755-8213-2513 Fax: 86-755-8213-7082

❖ The information contained in this document is intent to be a general product description only and is subject to changed without notice. Please contact cosmo in order to obtain the latest device data sheets before using any cosmo devices. 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.

❖ Please note : 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) and nuclear power control equipment unless it received prior written approval from cosmo. cosmo takes no responsibility for damages arise from the improper usage of our device . Should you require more information on the above notice, please contact cosmo