



2004

New Product Info.



COSMO New Product Launch

KMOC308X, Photo Traic

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COSMO Electronics Corporation.

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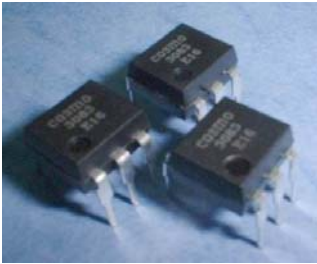
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COSMO New Product

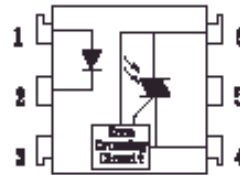
Photo Triac KMOC308X Series 800V

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

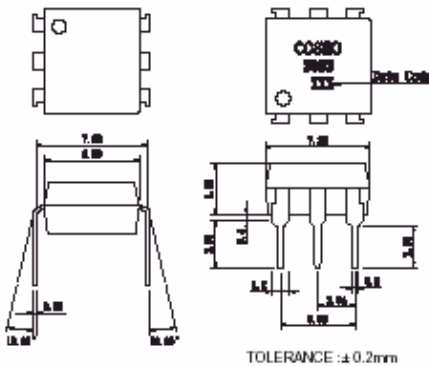


Photo Triac Product Family

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



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