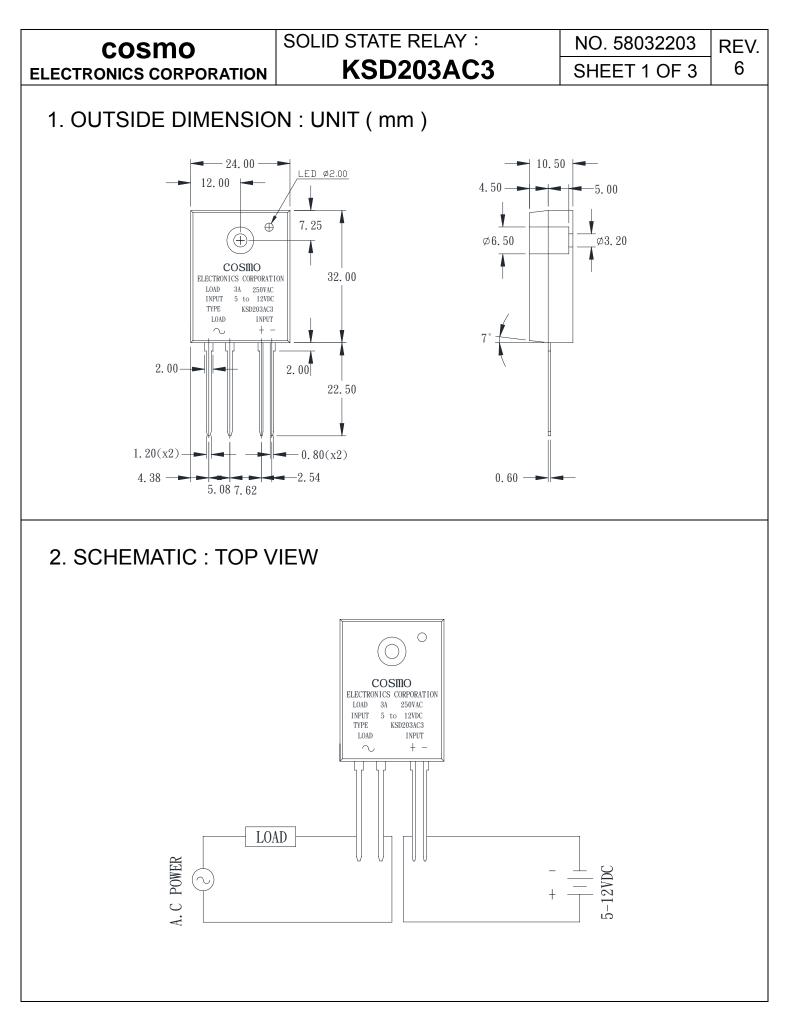
### **PRODUCT SPECIFICATION**



# **PRODUCT SPECIFICATION**

COSMO ECTRONICS CORPORATION		SOLID STATE RELAY : KSD203AC3				NO. 580322 SHEET 2 O		203	R	
								)F 3		
3.Absol	ute Maximum Ra	atings						(Ta=2	<b>5</b> ℃	
Parameter				Symbol		Rati	Rating		t	
Input	Input signal voltage		V <sub>IN</sub>		5-12		VDC			
	Drop-out voltage			V <sub>do</sub>		1		VDC		
Output	RMS on-state current			Ι <sub>Τ</sub>		3		Arms		
	Peak one cycle surge current			I <sub>surge</sub>		30		А		
	Repetitive peak-off state voltage			V <sub>DRM</sub>		600		V		
	Operating frequency			f		47~70		Hz		
	Critical rate of rise of on-state current			di/dt		50		A/us		
	Load supply voltage			١	V <sub>out</sub>	250		Vrms AC		
Isolation voltage input to output				V <sub>iso</sub>		4000		Vrms		
Operating temperature				T <sub>opr</sub>		-30~	-30~100		°C	
Storage temperature				T <sub>stg</sub>		-30~125		°C		
Soldering temperature 10 sec				T <sub>sol</sub>		260		°C		
4.Electr	rical Characterist	ics						(Ta=2	5℃)	
Parameter		Symbol	Conditions		MIN	TYP	MAX	Ur	nit	
Input	Pick-up voltage	V <sub>pu</sub>	It=1Arms				4	VD	C	
	Input current	l <sub>in</sub>	Vin=5~12V		5		35	m	A	
Output	On-state voltage	V <sub>T</sub>	I <sub>⊤</sub> =1Arms				1.5	Vrn	ns	
	Operating current	I <sub>op</sub>	Vout=240vrms		50			mAr	ms	
	Leakage current	I <sub>leak</sub>	Vout=240vrr	ns			7	mAr	ms	
	Critical rate of rise of	dv/dt			50	200		V/t	JS	
	off-state voltage									
	Zero-cross voltage	V <sub>ox</sub>				YES				
	Load Voltage Rating	V <sub>out</sub>	I <sub>⊤</sub> =50mArms MIN		50		280	VA	C	
Minimum trigger current		I <sub>FT</sub>	V <sub>DRM</sub> =600V				10	m	A	
Isolation resistance input to output		R <sub>ISO</sub>	DC500V		10			G	Ω	
Turn-on time		T <sub>on</sub>	60Hz AC				8.3	m	S	
Turn-off time		T <sub>off</sub>	60Hz AC				8.3	m	s	
Thermal re	sistance	R <sub>th</sub>								
(between ir	unction and case)	(j-c)l				1.3		°C/	۱۸/	

# **PRODUCT SPECIFICATION**

#### COSMO ELECTRONICS CORPORATION

### SOLID STATE RELAY : KSD203AC3

NO. 58032203 SHEET 3 OF 3

#### Application Notice

The statements regarding the suitability of products for certain types of applications are based on cosmo's knowledge of general applications of cosmo products. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to verify the specifications are suitable for use in a particular application. Customers are solely responsible for all aspects of their own product design or applications. The parameters provided in the datasheet may vary in different applications and performance may vary over time. All operating parameters (including typical parameters) must be validated by customer's technical experts for different applications. cosmo assumes no liability for customer' product design or applications. Product specifications do not expand or otherwise change cosmo's terms and conditions of purchase, including but not limited to the warranty expressed therein.

When using cosmo products, please comply with safety standards and instructions. cosmo has no liability and responsibility to the damage caused by improper use of the instructions specified in the specifications.

cosmo products are designed for use in general electronic equipment such as telecommunications, office automation equipments, personal computers, test and measurement equipments, consumer electronics, industrial control, instrumentation, audio, video.

cosmo devices shall not be used in equipment that requires higher level of reliability and safety, such as nuclear power control equipment, telecommunication equipment(trunk lines), space application, medical and other life supporting equipments, and equipment for aircraft, military, automotive or any other application that can cause human injury or death.

cosmo reserves the right to change the specifications, data, characteristics, structure, materials and other contents at any time without notice. Please contact cosmo to obtain the latest specification.

cosmo disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.