

# PRODUCT SPECIFICATION

DATE: 05/27/11'

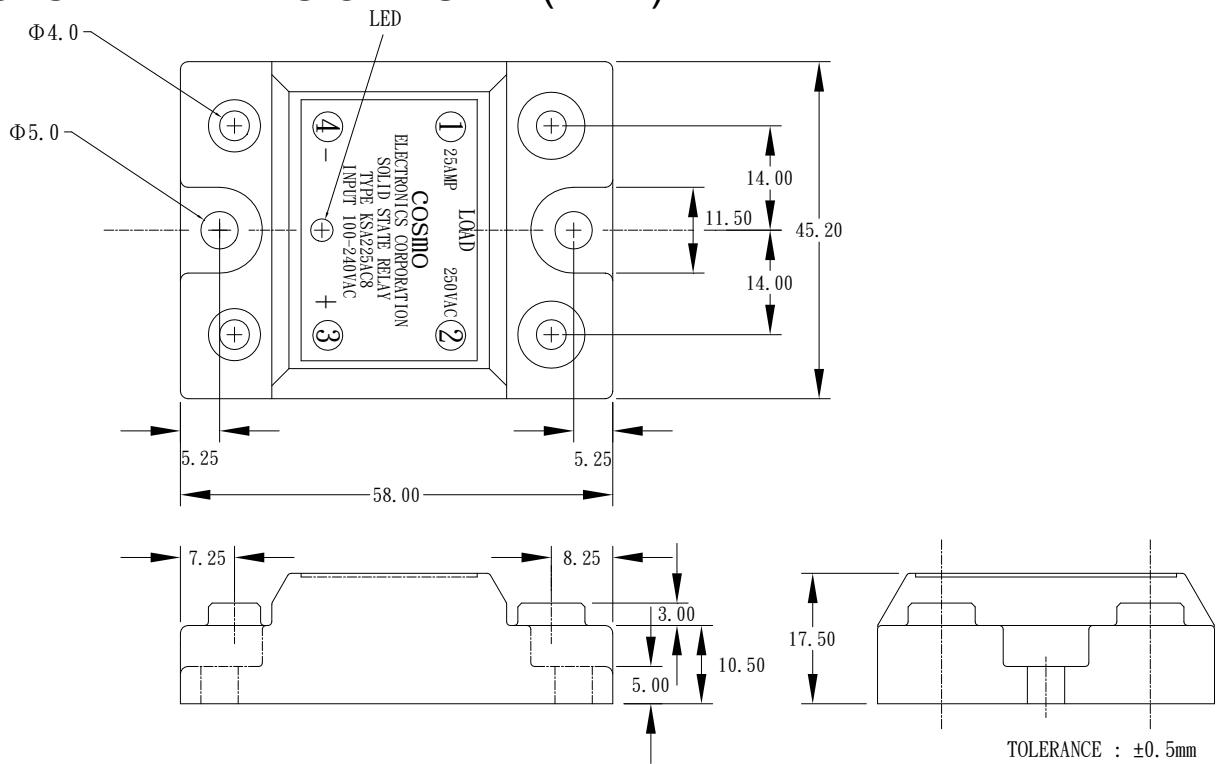
**cosmo**  
ELECTRONICS CORPORATION

SOLID STATE RELAY :  
**KSA225AC8**

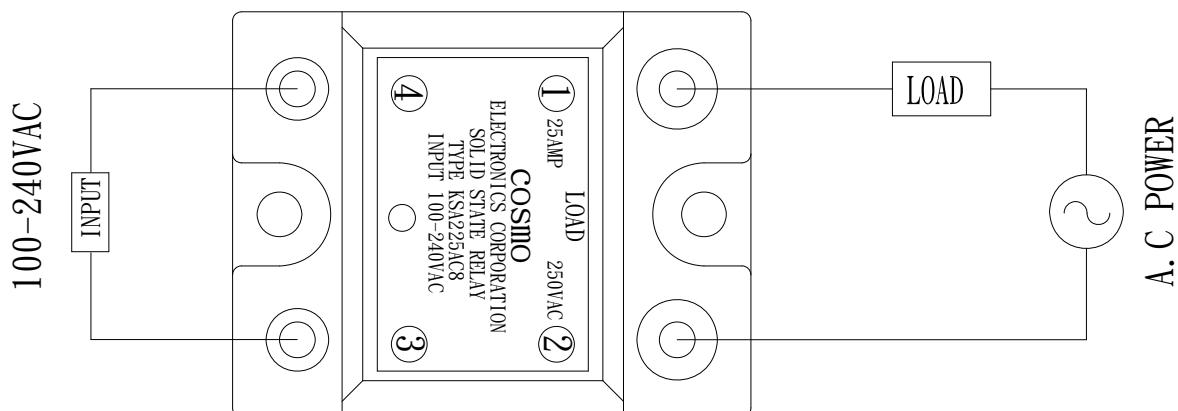
NO. 58083225

REV.  
6

## 1. OUTSIDE DIMENSION : UNIT ( mm )



## 2. SCHEMATIC : TOP VIEW



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<b>COSMO</b> ELECTRONICS CORPORATION	SOLID STATE RELAY : <b>KSA225AC8</b>	NO. 58083225	REV. 6
SHEET 2 OF 2			

## 3. Absolute Maximum Ratings

(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Input signal voltage	V <sub>IN</sub>	100~240	VAC
	Drop-out voltage	V <sub>do</sub>	10	VAC
Output	RMS on-state current	I <sub>T</sub>	25	Arms
	Peak one cycle surge current (8.3ms)	I <sub>surge</sub>	250	A
	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	V <sub>out</sub>	250	Vrms AC
Isolation voltage input to output		V <sub>iso</sub>	4000	Vrms
Operating temperature		T <sub>opr</sub>	-30~100	°C
Storage temperature		T <sub>stg</sub>	-30~125	°C
Soldering temperature 10 sec		T <sub>sol</sub>	300	°C

## 4. Electrical Characteristics

(Ta=25°C)

Parameter		Symbol	Conditions	MIN	TYP	MAX	Unit
Input	Pick-up voltage	V <sub>pu</sub>	Rin=11KΩ		11	100	VAC
	Input current	Rin					KΩ
Output	On-state voltage	V <sub>T</sub>	I <sub>T</sub> =1Arms	50	3.5	1.5	Vrms
	Operating current	I <sub>op</sub>	Vout=240Vrms				mArms
	Leakage current	I <sub>leak</sub>	Vout=240Vrms			8	mArms
	Critical rate of rise of off-state voltage	dv/dt		100			V/us
	Zero-cross voltage	V <sub>ox</sub>			YES		
	Load Voltage Rating	V <sub>out</sub>	I <sub>T</sub> =50mArms MIN	50		280	VAC
Minimum trigger current		I <sub>FT</sub>	V <sub>DRM</sub> =600V			25	mA
Isolation resistance input to output		R <sub>ISO</sub>	DC500V	10			GΩ
Turn-on time		T <sub>on</sub>	60Hz AC			8.3	mS
Turn-off time		T <sub>off</sub>	60Hz AC			8.3	mS
Thermal resistance (between junction and case)		R <sub>th</sub> (j-c)l				2.5	°C/W