PRODUCT SPECIFICATION

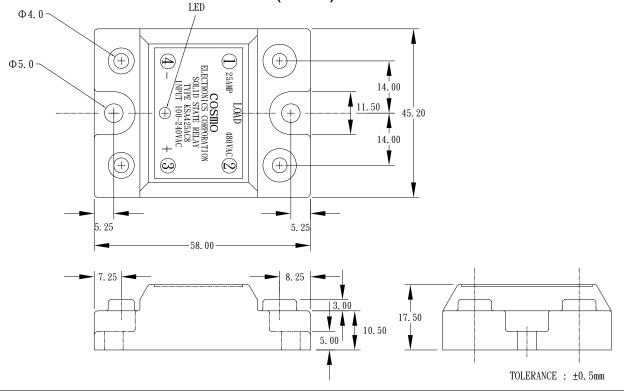
COSMO ELECTRONICS CORPORATION

SOLID STATE RELAY: KSA425AC8

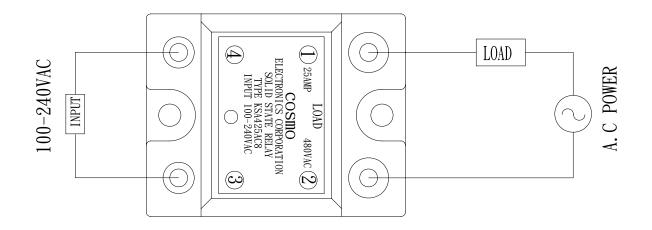
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1. OUTSIDE DIMENSION: UNIT (mm)



2. SCHEMATIC: TOP VIEW



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3.Absolute Maximum Ratings				(Ta=25°ℂ)
Parameter		Symbol	Rating	Unit
Input	Input signal voltage	V _{IN}	100~240	VAC
	Drop-out voltage	V_{do}	10	VAC
Output	RMS on-state current	I _T	25	Arms
	Peak one cycle surge current (8.3ms)	I _{surge}	250	Α
	Repetitive peak-off state voltage	V_{DRM}	800	V
	Operating frequency	f	47~70	Hz
	Critical rate of rise of on-state current	di/dt	50	A/us
	Load supply voltage	V_{out}	480	Vrms AC
Isolation voltage input to output		V _{iso}	4000	Vrms
Operating temperature		T_{opr}	-30~100	$^{\circ}\!\mathbb{C}$
Storage temperature		T _{stg}	-30~125	$^{\circ}\mathbb{C}$
Soldering temperature 10 sec		T _{sol}	300	$^{\circ}$ C

4.Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	MIN	TYP	MAX	Unit
Pick-up voltage	V_{pu}	Rin=11K Ω			100	VAC
Input current	Rin			11		ΚΩ
On-state voltage	V_{T}	I _T =1Arms			1.5	Vrms
Operating current	I _{op}	Vout=480Vrms	50			mArms
Leakage current	I _{leak}	Vout=480Vrms			12	mArms
Critical rate of rise of	dv/dt		50	150		V/us
off-state voltage						
Zero-cross voltage	V_{ox}			YES		
Load Voltage Rating	V_{out}	I _T =50mArms MIN	75		480	VAC
Minimum trigger current		V _{DRM} =800V			25	mA
Isolation resistance input to output		DC500V	10			GΩ
Turn-on time		60Hz AC			8.3	mS
Turn-off time		60Hz AC			8.3	mS
Thermal resistance						
(between junction and case)				2.5		°C\ W
	Pick-up voltage Input current On-state voltage Operating current Leakage current Critical rate of rise of off-state voltage Zero-cross voltage Load Voltage Rating m trigger current resistance input to output time I resistance	Pick-up voltage Input current Rin On-state voltage Operating current Leakage current Critical rate of rise of off-state voltage Zero-cross voltage Vox Load Voltage Rating Ton Itime Ton Itime I resistance I resistance Vpu Rin Rin Vpu Rin Rin Voy Loap Voy Loap Rich Rich Rich Rich Rich Rich Rich Rich	Pick-up voltage V_{pu} Rin=11KΩ Input current Rin On-state voltage V_T I_T =1Arms Operating current I_{op} Vout=480Vrms Leakage current I_{leak} Vout=480Vrms Critical rate of rise of off-state voltage V_{ox} V_{ox} Load Voltage Rating V_{out} I_T =50mArms MIN In trigger current I_{FT} V_{DRM} =800V In resistance input to output R_{ISO} DC500V Itime T_{off} 60Hz AC I resistance R_{th}	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pick-up voltage V_{pu} Rin=11KΩ Input current Rin 11 On-state voltage V_T $I_T = 1$ Arms Operating current I_{op} Vout=480Vrms Leakage current I_{leak} Vout=480Vrms Critical rate of rise of off-state voltage V_{ox} V_{ox} Zero-cross voltage V_{ox} V_{ox} Load Voltage Rating V_{out} $I_T = 50$ mArms MIN 75 In trigger current I_{FT} $V_{DRM} = 800V$ $V_{ox} = 10$ marms MIN $V_{ox} = 10$ marms MIN In resistance input to output $V_{ox} = 10$ marms MIN In resistance input to output $V_{ox} = 10$ marms MIN	Pick-up voltage V_{pu} Rin=11KΩ 100 Input current Rin 11 On-state voltage V_T I_T =1Arms 1.5 Operating current I_{op} Vout=480Vrms 50 Leakage current I_{leak} Vout=480Vrms 12 Critical rate of rise of off-state voltage V_{ox} YES Zero-cross voltage V_{ox} YES Load Voltage Rating V_{out} I_T =50mArms MIN 75 480 In trigger current I_{FT} V_{DRM} =800V 25 In resistance input to output R_{ISO} DC500V 10 Itime T_{off} 60Hz AC 8.3 Itime T_{off} 60Hz AC 8.3 It resistance R_{th}

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Application Notice

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