

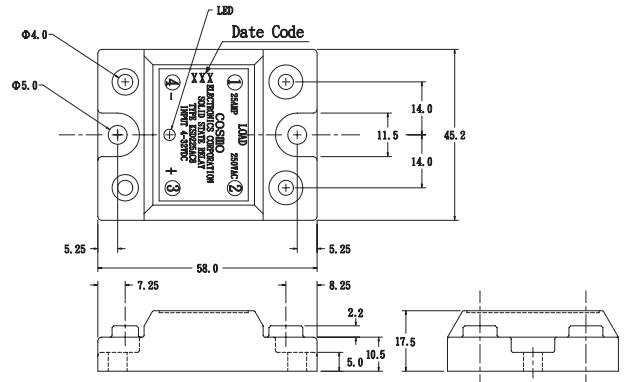
Features

1. Molded epoxy body.
2. Zero crossing circuit.
3. High input/output insulation.
4. Small size and light weight.
5. Fast reactive speed.
6. Good heat sinking.
7. Normally open.

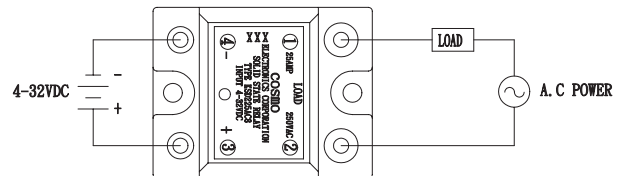
Applications

1. Household Appliances.
2. Temperature Control System.
3. Industrial Automatic Control.
4. Lighting System.
5. Office Appliances.
6. Factory Appliances.

Outside Dimension : Unit (mm)



Schematic : Top View



Absolute Maximum Ratings

(Ta=25°C)

	Parameter	Symbol	Rating	Unit
Input	Input Signal Voltage	V_{IN}	4-32	VDC
	Drop-out Voltage	V_{do}	1	VDC
Output	RMS on-state current	I_T	25	Arms
	Peak one cycle surge current (8.3 ms)	I_{surge}	250	A
	Repetitive peak-off state Voltage	V_{DRM}	600	V
	Operating frequency	f	47-70	Hz
	Critical rate of rise of on-state current	di/dt	50	A/ μ S
	Load supply voltage	V_{out}	250	Vrms AC
	Isolation Voltage input to output	V_{iso}	4000	Vrms
Operating Temperature		T_{opr}	-30~100	°C
Storage Temperature		T_{stg}	-30~125	°C

Electrical Characteristics

(Ta=25°C)

	Parameter	Symbol	Conditions	MIN	TYP	MAX	Unit
Input	Pick-up Voltage	V_{pu}	$I_T=1A_{rms}$			4	VDC
	Input current	I_{in}	$V_{in}=4-32V$	5		12	mA
Output	On-state Voltage	V_T	$I_T=1A_{rms}$			1.5	Vrms
	Operating Current	I_{op}	$V_{out}=240V_{rms}$	50			mArms
	Leakage Current	I_{leak}	$V_{out}=240V_{rms}$		3.5	7	mArms
	Critical rate of rise of off-state Voltage	dv/dt	See Note 1	50	200		V/ μ S
	Zero-cross Voltage				Yes		
	Load Voltage Rating	V_{out}	$I_T=50mA_{rms}$ MIN	50		280	VAC
Minimum trigger current		I_{FT}	$V_{DRM}=600V$			10	mA
Isolation resistance input to output		R_{iso}	DC500V	10^{10}			Ω
Turn-on time		T_{on}	60Hz AC			8.3	mS
Turn-off time		T_{off}	60Hz AC			8.3	mS
Thermal resistance (between junction and case)		$R_{th}(j-c)$			1.3		°C/W

Note1 : Output (dv/dt) protection is provided in all models, and they are designed to switch resistive or inductive loads to 0.2 power factor. The dv/dt rating is based on source impedance of 50 ohms.

Data Curve

Fig.1 RMS On-state Current vs. Ambient Temperature

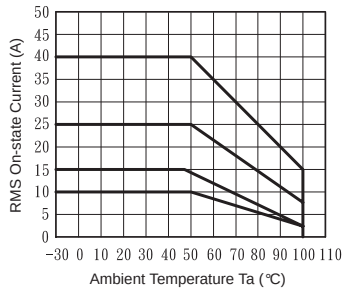


Fig.2 Surge Current vs. Time $f=60\text{Hz}$
 $T_j=25^\circ\text{C}$

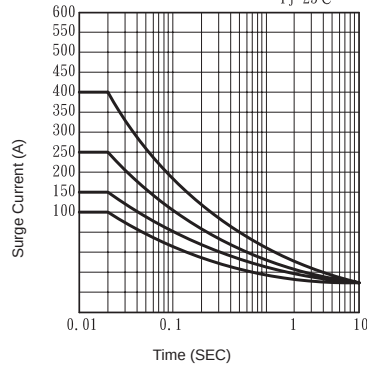


Fig.3 Open Circuit Leak Current vs. Supply Voltage

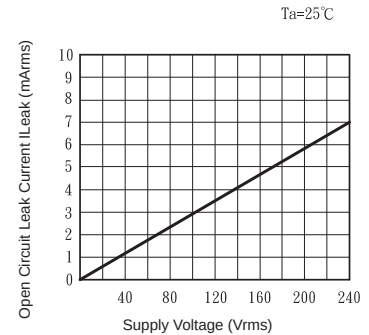


Fig.4 RMS On-state Current vs. Case Temperature

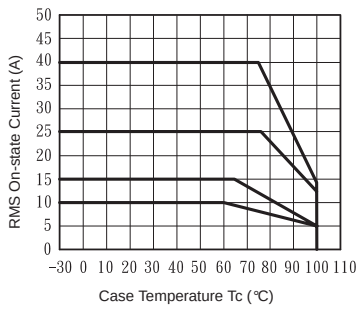


Fig.5 Input Voltage vs. Ambient Temperature

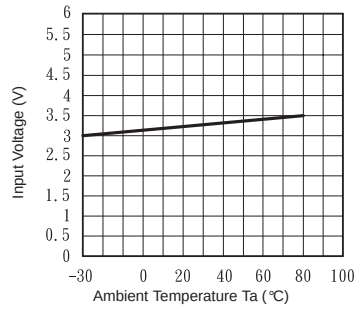


Fig.6 Input Current vs. Input voltage

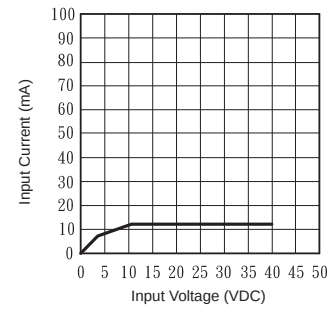


Fig.7 Action waveform

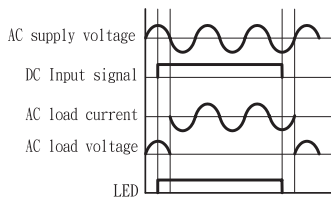


Fig.8 WIRING DIAGRAM

