

#### **Product Description**

- ◆ TTL Compatible Drive
- ◆ TRIAC Output
- Control Voltage: 5VDC, 12VDC, 24VDC
- Control Current: 10mA
- ◆ Load Current: 2A
- Dielectric Strength: 2500Vrms
- PCB Mounted
- RoHS Compliant











# **Product Selection**

**KSA** 

KSA Series

240

Load Voltage

240: 240VĂC

D

DC Control

2 Load Current

2: 2Amp

R

Switching Mode Blank: Zero Crossing R: Random-on

24

Control Mode 5: 5VDC 12: 12VDC 24: 24VDC I: 10mA



Pin Layout Blank: Standard T: T Type Footprint



Customized Code

#### Available Part Numbers

Control Mode	Part Numbers	
5VDC	KSA240D2-5	KSA240D2-5T
	KSA240D2-5	KSA240D2-5T
12VDC	KSA240D2-12	KSA240D2-12T
IZVDC	KSA240D2R-12	KSA240D2R-12T
24VDC	KSA240D2-24	KSA240D2-24T
	KSA240D2R-24	KSA240D2R-24T
10 A	KSA240D2-I	KSA240D2-IT
10mA	KSA240D2R-I	KSA240D2R-IT

#### **Technical Specifications**

Input Specifications (Ta=25°C)		
	5	4~6VDC
Control Voltage Range	12	9.6~14.4VDC
	24	19.2~28.8VDC
Control Current Range		10mA~25mA
	5	4VDC
Must Turn-on Voltage	12	9.6VDC
	24	19.2VDC
Must Turn-on Current		10mA
Must Turn-off Current		1mA
Must Turn-off Voltage	5 / 12 / 24	1VDC
Maximum Input Current	5 / 12 / 24	25mA

utput Specifications (Ta=25°C)			
Load Voltage Range	24~280VAC		
Maximum Transient Overvoltage	600Vpk		
Maximum Off-State Leakage Current (@Rated Load Voltage)	1.5mA		
Minimum Off-State (dv/dt @Maximum Rated Voltage)	200V/µs		









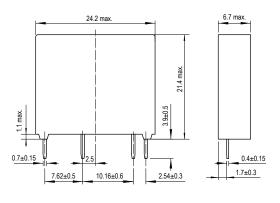
Output Specifications (Ta=25°C)			
Load Current Range		0.1~2A	
Maximum Surge Current (@10ms)		35Apk	
Maximum I <sup>2</sup> t for Fusing (@10ms)		6.1A <sup>2</sup> s	
Maximum On-State Voltage Drop (@Rated Current)		1.5Vrms	
Maximum Turn-on Time	Zero Crossing	1/2cycle+1ms	
	Random-on	1ms	
Maximum Turn-off Time		1/2cycle+1ms	
Operational Frequency Range		47~63Hz	
Minimum Power Factor		0.5	

	General Specifications (Ta=25°C)			
1	Dielectric Strength (50/60Hz)	Input/Output		3000Vrms
	Minimum Insulation Resistance (@500VDC)			1000ΜΩ
1	Ambient Temperature Range			-30°C ~ +80°C
	Storage Temperature Range			-30°C ~ +100°C
ĺ	Weight (Typical)			6g

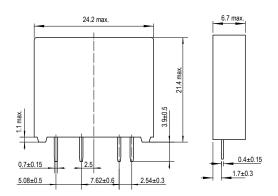
# Applications

Suitable for small power valves or pump control for HVAC applications.

# **Outline Dimensions**

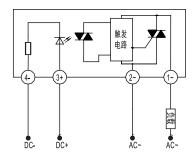


Standard Footprint



T Type Footprint

# Wiring Diagram



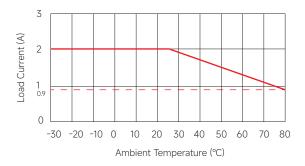








# Thermal Derating Curve



# **General Notes**

- 1. Soldering must be finished within 10 seconds at 260°C, or finished within 5 seconds at 350°C. Otherwise it may cause damage to the relay.
- 2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.
- 3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

# ! Warnings

- 1. The product's side panels may be hot, allow the product to cool before touching.
- 2. Disconnect all power before installing or working with this equipment.
- 3. Verify all connections and replace all covers before turning on power.

# **Certification Standards**

Certification	Test standard	Certificate Number
UL	UL508	E471925
TUV	EN62314	B 089797 0016





