Product Description

- Zero crossing or Random-on switching
- TRIAC Output
- Control Voltage: 4-15VDC or 15-32VDC
- Load Current: 2A or 3A @24-440VAC
- Dielectric Strength: 4000Vrms
- Internal RC Absorption Circuit (Optional)
- PCB Mounted
- RoHS Compliant

Note: The product without RC or product with MOV is not UL certified.

Ordering Information

KSB	240	D	3	R	-L	N	T	M	(XXX)
KSB Series(1)	Load Voltage 240: 240VAC 380: 380VAC	DC Control	Load Current 2: 2Amp 3: 3Amp	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage L: 4-15VDCInput H: 15-32VDC Input	Blank: with RC N: without RC	Blank: Standard T: T Type Footprint	Blank: without MOV M: with MOV	Customized Code

(1)Part numbers available are listed in the table below.

Control Voltage	2A		3A	
-L	KSB240D2-L(N)	KSB240D2R-L(N)	KSB240D3-L(N)	KSB240D3R-L(N)
	KSB240D2-L(N)T	KSB240D2R-L(N)T	KSB240D3-L(N)T	KSB240D3R-L(N)T
	KSB380D2-L(N)	KSB380D2R-L(N)	KSB380D3-L(N)	KSB380D3R-L(N)
	KSB380D2-L(N)T	KSB380D2R-L(N)T	KSB380D3-L(N)T	KSB380D3R-L(N)T
-H	KSB240D2-H(N)	KSB240D2R-H(N)	KSB240D3-H(N)	KSB240D3R-H(N)
	KSB240D2-H(N)T	KSB240D2R-H(N)T	KSB240D3-H(N)T	KSB240D3R-H(N)T
	KSB380D2-H(N)	KSB380D2R-H(N)	KSB380D3-H(N)	KSB380D3R-H(N)
	KSB380D2-H(N)T	KSB380D2R-H(N)T	KSB380D3-H(N)T	KSB380D3R-H(N)T
With MOV	KSB240D2-L(N)M	KSB240D2R-L(N)M	KSB240D3-L(N)M	KSB240D3R-L(N)M
	KSB380D2-L(N)M	KSB380D2R-L(N)M	KSB380D3-L(N)M	KSB380D3R-L(N)M
	KSB240D2-H(N)M	KSB240D2R-H(N)M	KSB240D3-H(N)M	KSB240D3R-H(N)M
	KSB380D2-H(N)M	KSB380D2R-H(N)M	KSB380D3-H(N)M	KSB380D3R-H(N)M
	KSB380D2-LTM			

General Specifications

Input Specifications (Ta=25℃)		
Control Voltage Range	L	4-15VDC
	H	15-32VDC
Must Turn-on Voltage	L	4VDC
	H	15VDC
Must Turn-off Voltage		1VDC
Maximum Input Current	L	40mA @15VDC
	H	25mA @32VDC

General Specifications

Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	24-280VAC
	380VAC	24-440VAC
Maximum Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
Maximum Off-State Leakage Current	without RC	0.1mA
@Rated Load Voltage	with RC	5mA
Minimum Off-State dv/dt@Maximum Rated Voltage	200V/μs	
Load Current Range	2A	0.1-2A
	3A	0.1-3A
Maximum Surge Current (50Hz)	2A	35Apk
	3A	80Apk
Maximum I^2t for Fusing (10ms)	2A	6.1A^2s
	3A	32A^2s

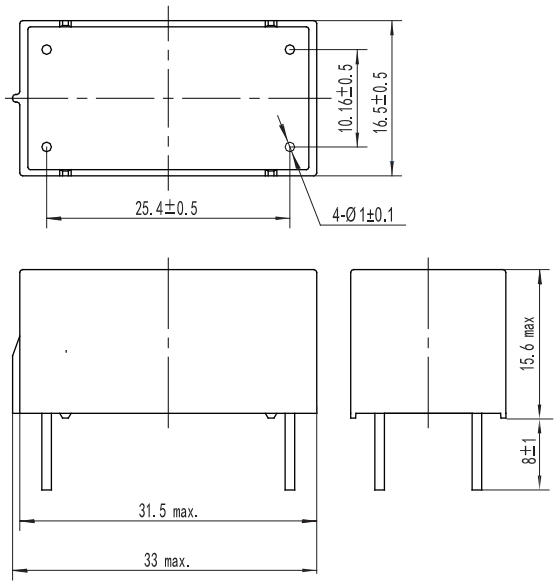
Maximum On-State Voltage Drop@Rated Current	1.5Vrms
Maximum Turn-on Time	Zero Crossing：1/2 cycle+1ms,Random-on：1ms
Maximum Turn-off Time	1/2cycle+1ms
Operational Frequency Range	47-63Hz
Minimum Power Factor (@ Maximum load)	0.5

General Specifications (Ta=25°C)	
Dielectric Strength (50/60Hz)	4000Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ
Ambient Temperature Range	-30°C ～ +80 °C
Storage Temperature Range	-30°C ～ +100 °C
Weight (Typical)	15g

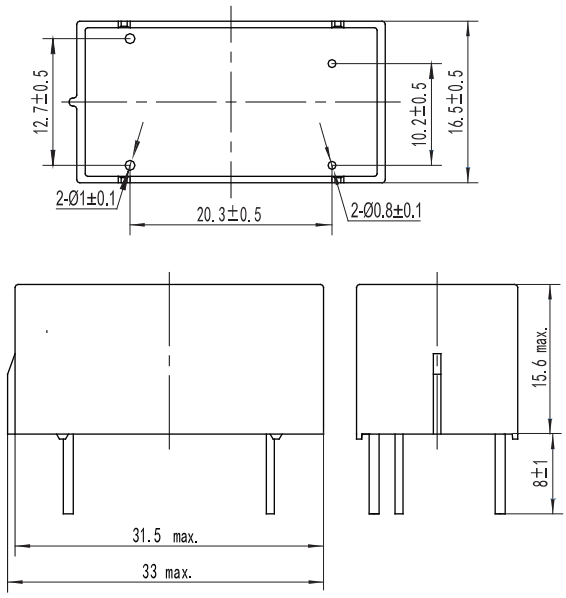
Applications

Suitable for pumps, valve control, motor control, and ect.

Outline Dimensions

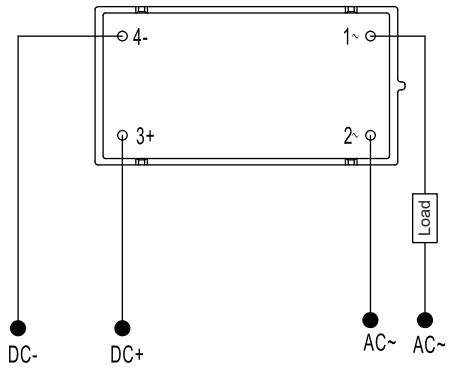


Standard Footprint

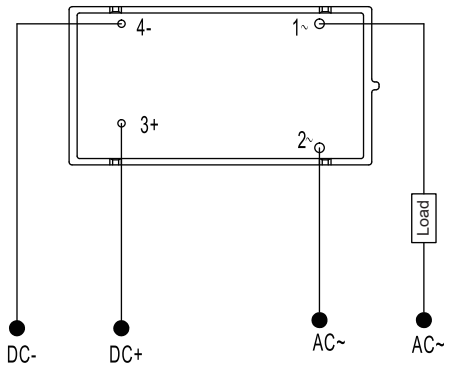


T Type Footprint

Wiring Diagram

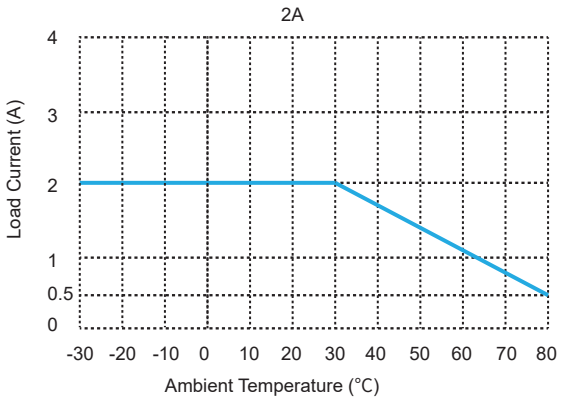


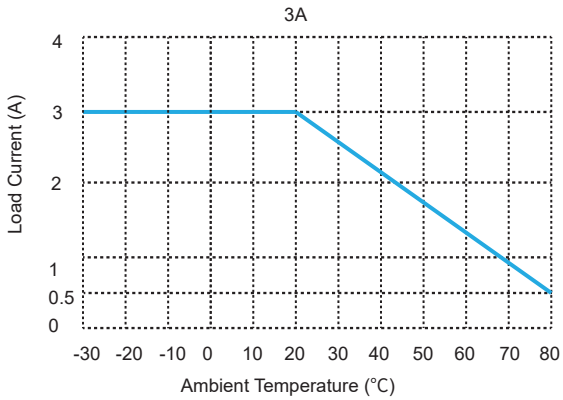
Standard Footprint



T Type Footprint

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
UL	UL508

