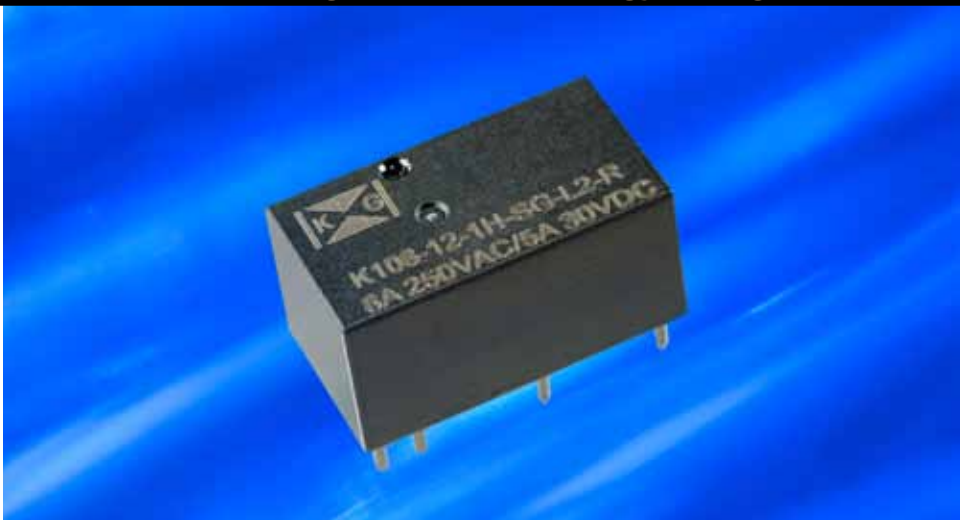


**SUB-MINIATURE  
INTERMEDIATE POWER RELAY**

- » 8A current relay
- » High sensitivity 150mW
- » High switching capacity
- » UL Listed File No.: E134517
- » TUV File No.: B121253286006
- » RoHS compliant
- » Outline dimensions:  
(20.2 x 11.0 x 10.4)mm



**Contact Data** [Click here for glossary of terms](#)

	<b>1A</b>	<b>2A, 1A + 1B</b>
Contact arrangement	<b>1A</b>	<b>2A, 1A + 1B</b>
Rated load	8A 250Vac	5A 250Vac
	5A 30Vdc	5A 30Vdc
Contact material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Max. switching voltage	380Vac/240Vdc	380Vac/240Vdc
Max. switching current	8A	5A
Max. switching power	2,000VA/150W	1,250VA/150W
Electrical endurance	30,000 cycles	30,000 cycles
Mechanical endurance	10,000,000 cycles	10,000,000 cycles
Set/Operate time	10ms max.	10ms max.
Release time (single side stable)	5ms max.	5ms max.
Reset time (latching)	10ms max.	10ms max.

**Characteristics** [Click here for glossary of terms](#)

Insulation resistance	1,000 MΩ (500Vdc)
Dielectric strength:	
Coil to contact	3,000 Vac for 1 min.
Across open contacts	1,000 Vac for 1 min.
Between contact sets	2,000 Vac for 1 min.
Ambient temperature	-40°C to +85°C
Ambient humidity	5% to 85% RH
Vibration	2.0mm (DA), 10 to 55Hz
Shock resistance:	
Functional*	20G
Destructive	100G
Unit weight	Approx. 4.5 g
Termination	PCB
Construction	Sealed IP67, Flux proofed

\* Unit may change state but is still functional.

**Coil Data** [Click here for glossary of terms](#)

	<b>Single Coil (Latching)</b>	<b>Dual Coil (Latching)</b>
<b>Coil Consumption</b>	150mW	300mW

Nominal Coil Voltage	Min. Operating Voltage	Max. Operating Voltage	Coil Resistance (Ω ± 10%) @ 23°C	
			Single Coil (Latching)	Dual Coil (Latching)
3Vdc	2.4Vdc	3.0Vdc	60Ω	2 x 30Ω
5Vdc	4.0Vdc	6.0Vdc	167Ω	2 x 83Ω
6Vdc	4.8Vdc	7.8Vdc	240Ω	2 x 120Ω
9Vdc	7.2Vdc	11.7Vdc	540Ω	2 x 270Ω
12Vdc	9.6Vdc	15.6Vdc	960Ω	2 x 480Ω
24Vdc	19.2Vdc	31.2Vdc	3840Ω	2 x 1920Ω

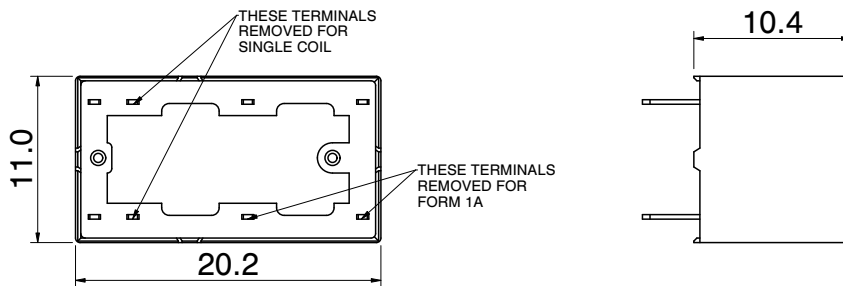
## Ordering Information

<b>Relay Series:</b>	K108	-	D	012	P	-	1A	T	G	-	Y
<b>Coil Type:</b>	S: Single coil D: Dual coil										
<b>Coil Voltage<sup>1</sup>:</b>	3, 5, 6, 9, 12, 24 Vdc										
<b>Coil Polarity:</b>	P: Positive N: Negative										
<b>Contact Form:</b>	1A: Form 1A – NO 1B: Form 1B – NC 2A: Form 2A – NO 2B: Form 2B – NC 1X: 1 Form A + 1 Form B										
<b>Contact Material:</b>	T: AgSnO <sub>2</sub>										
<b>Contact Plating:</b>	G: Gold plated O: No plating										
<b>Sealed/Non-Sealed:</b>	Y: Sealed IP67 Z: Flux proofed										

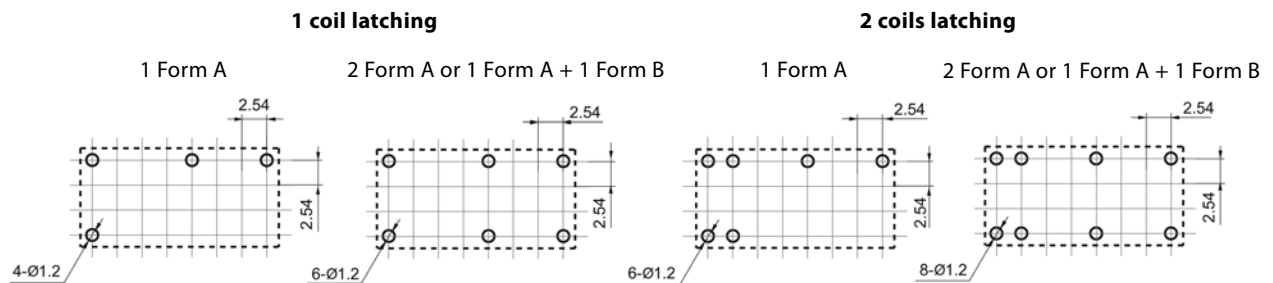
<sup>1</sup>Coil voltage should be indicated in three digit format (6Vdc = 006)

## Dimensional Drawings

All dimensions in mm unless otherwise noted. For more information, please contact KG Technologies.

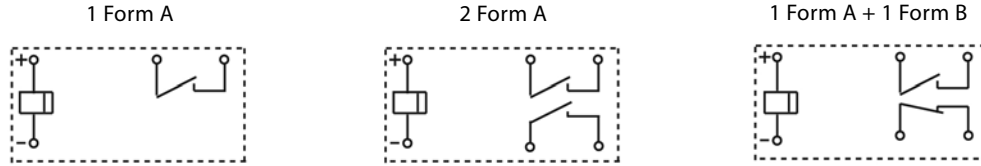


## PCB Layout

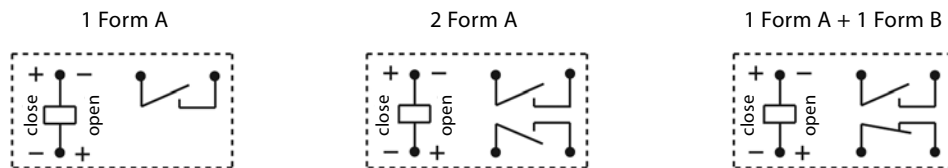


## Wiring Diagrams

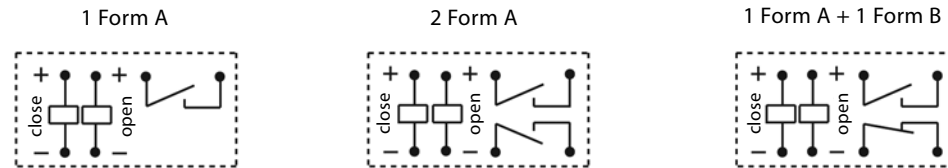
Single Side Stable



1 Coil Latching

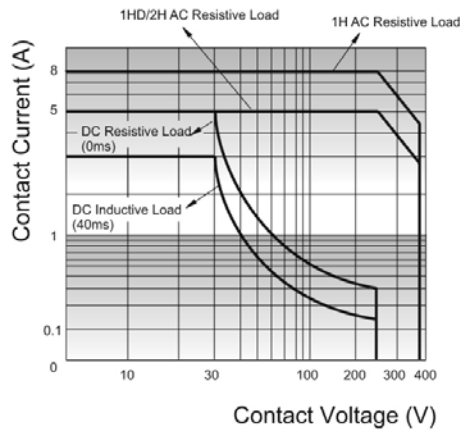


2 Coils Latching

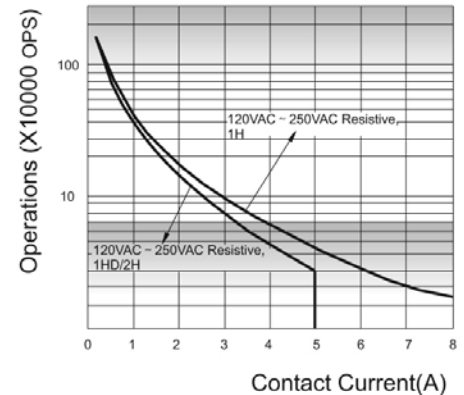


## Characteristic Curves

Maximum Switching Power



Endurance Curve



## Application Notes

- 1:** It is possible that during transit or final assembly the relay could change state. Therefore, it is recommended that all relays be set to the desired state via a power supply.
- 2:** In order to maintain an "Open" or "Closed" state of the relay, the coil voltage should reach the rated voltage. The pulse width should be 50ms minimum to ensure a proper change of state. DO NOT energize both T1 and T3 at the same time on a Dual Coil or energize the coil for longer than 1 minute (damage to the coil could incur).
- 3:** For definitions of terms used in this data sheet, see glossary at [www.kgtechnologies.net](http://www.kgtechnologies.net).

**Disclaimer:** This data sheet is for reference only. All specifications are subject to change without prior notice. KG Technologies, Inc. cannot predict every possible application for our relays. While we do our best to make our relays as versatile as possible, we highly recommend contacting our engineering team if you have any questions. KG Technologies, Inc. is not responsible for malfunctioning relays when operated outside the specified parameters given in this data sheet.