

**SUB-MINIATURE
INTERMEDIATE POWER RELAY**

- » High-switching capacity
1A, 1B: 10A 250Vac/8A 30Vdc;
2A, 1X (1A + 1B): 8A 250Vac/30Vdc
- » High sensitivity: 200mW
- » 4,000V dielectric strength (between coil and contacts)
- » Outline dimensions: (20.0 x 15.0 x 10.2)mm
- » RoHS compliant



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

Rated load	10A 250Vac/30Vdc	8A 250Vac/30Vdc
Contact arrangement	1A or 1B	2A, 2B or 1X (1A + 1B)
Contact material	AgSnO ₂ , AgNi	AgSnO ₂ , AgNi
Max. switching voltage	277Vac	277Vac
Max. switching current	10A	8A
Max. switching power	2,500VA/300w	2,000VA/240w
Electrical endurance	100,000 cycles	30,000 cycles for Form 2A only
Mechanical endurance	10,000,000 cycles	10,000,000 cycles

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

Insulation resistance	1,000 MΩ (500Vdc)
Dielectric strength:	
Coil to contact	4,000 Vac for 1 min.
Across open contacts	1,000 Vac for 1 min.
Ambient temperature	-40 to + 70°C
Vibration	1.5mm (DA), 10 to 55Hz
Shock resistance:	10G
Termination	PCB
Unit weight	Approx. 6 g
Construction	Sealed IP67, Flux proof
Ambient humidity	5% to 85% RH

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

	Single Coil (Latching)	Dual Coil (Latching)
Coil Consumption	200mW	280mW
Pulse Duration	Minimum 20ms (100ms to 200ms recommended)	

Nominal Coil Voltage	Min. Operating Voltage	Coil Resistance (Ω ± 10%) @ 23°C	
		Single Coil (Latching)	Dual Coil (Latching)
3Vdc	2.1Vdc	45Ω	2 x 32.1Ω
5Vdc	3.5Vdc	125Ω	2 x 89.3Ω
6Vdc	4.2Vdc	180Ω	2 x 129Ω
9Vdc	6.3Vdc	405Ω	2 x 289Ω
12Vdc	8.4Vdc	720Ω	2 x 514Ω
24Vdc	16.8Vdc	2880Ω	2 x 2056Ω

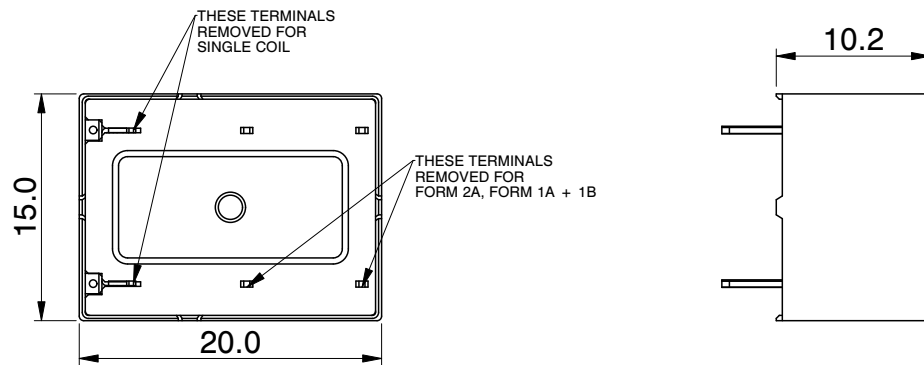
Ordering Information

Relay Series:	K107	-	S	012	P	-	1A	T	-	Y	L1
Coil Type:	S: Single coil D: Dual coil										
Coil Voltage¹:	3, 5, 6, 9, 12, 24 Vdc										
Coil Polarity:	P: Positive N: Negative										
Contact Form:	1A: Form 1A – NO 1B: Form 1B – NC 2A: Form 2A – NO 2B: Form 2B – NC 1X: Form 1X (1A + 1B)										
Contact Material:	T: AgSnO ₂ K: AgNi										
Sealed/Non-Sealed:	Y: Sealed IP67 Z: Flux proofed										
Sort:	L1: 1 coil latching L2: 2 coils latching										

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

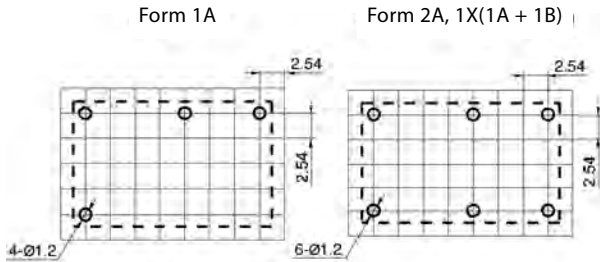
Dimensional Drawings

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

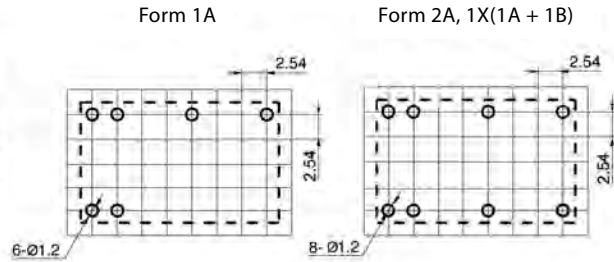


Dimensional Drawings

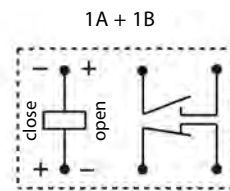
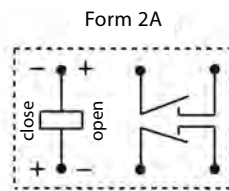
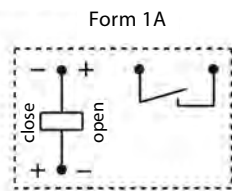
1 coil latching



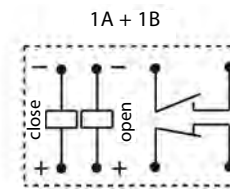
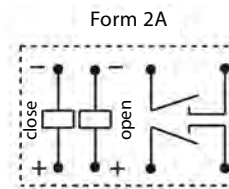
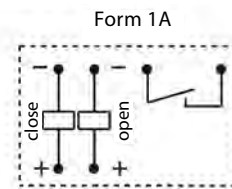
2 coils latching



1 coil latching



2 coils latching



Additional Application Notes

- 1:** All relays are shipped in the "Closed" position. It is possible that during transit or final assembly the relay could change its state to the "Open" position. Therefore, it is recommended that all relays be set to the desired state of the relay 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:** Relays without flex-wire cannot be tin-soldered. Moving or bending the terminals could cause damage to the internal structure of the relay.
- 4:** For definitions of terms used in this data sheet, see glossary at 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.