



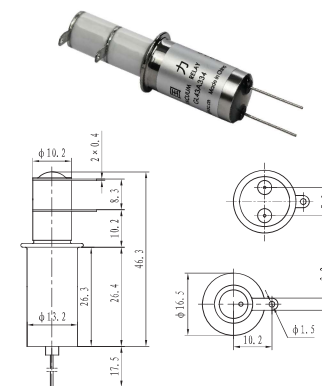
RELAY

FOR SEMICONDUCTOR

GL41A GL41B

FEATURES:

- Slim design is extremely space efficient in multi-relay applications
- RF efficient design offers high power handling in a small package
- Durable tungsten contacts for hot load switching
- Vacuum dielectric for effective arc quenching when opening under load
- Can be mounted and used in any position
- Contact GL for load switching applications



Contact & Relay Ratings		GL41A	GL41B	GL41C
Contact Form		A	B	C
Contact Arrangement		SPST-NO	SPST-NC	SPDT
Voltage, Test Max. [kV Peak] (30μA Leakage Max., dc or 50Hz)		6	6	6
Voltage, Operating Max. [kV Peak]	dc or 50Hz	5	5	5
	2.5MHz	4.5	4.5	4.5
Contacts & to Base (30μA Leakage Max.)	16MHz	3.5	3.5	3.5
	32MHz	2.8	2.8	2.8
Current, Continuous Carry Max [Amps]	dc or 50Hz	30	30	30
	2.5MHz	24	24	24
	16MHz	16	16	16
	32MHz	12	12	12
Coil Hi-Pot (V RMS, 50 Hz) [V]		500	500	500
Capacitance [pF]	Across Open Contacts	1.2	1.2	1.2
	Contacts to Ground	1.2	1.2	1.2
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.02	0.02	0.02
Operate Time, Max [ms]		10	10	10
Release Time, Max [ms]		10	10	10
Life, Mechanical [Cycles]		1million	1million	1million
Weight [g(oz)]		28(1)	28(1)	28(1)
Vibration (Sine 10-500Hz Peak) [G' s]		10	10	10
Shock (11ms 1/2 Sine Peak) [G' s]		50	50	50
Temperature Ambient Operating [°C]		-55~125	-55~125	-55~125

COIL RATINGS			
Nominal, Volts dc [Vdc]	12	26.5	115
Pick-up, Volts dc, Max. [Vdc]	8	16	80
Drop-Out, Volts dc [Vdc]	0.5-5	1-10	5-50
Coil Resistance (Ohms ±10%) [Ω ±10%]	70	290	4700

*Ratings listed are for 25° C, sea level conditions.

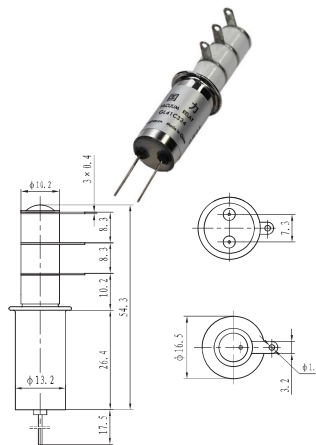
GL41	A	3	3	4
Contact Arrangement A=SPST-NO B=SPST-NC C=SPDT				
Coil Voltage 2 = 12 Vdc, Inserting 3 = 26.5 Vdc, Inserting 5 = 115 Vdc, Inserting 7 = 12 Vdc, Turret Terminal 8 = 26.5 Vdc, Turret Terminal 9 = 115 Vdc, Turret Terminal				
High Voltage Connection 3= Solder Connection				
Mounting 2 = Flanged 4 = Standard				

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GL41C

FEATURES:

- Slim design is extremely space efficient in multi-relay applications
- RF efficient design offers high power handling in a small package
- Durable tungsten contacts for hot load switching
- Vacuum dielectric for effective arc quenching when opening under load
- Can be mounted and used in any position
- Contact GL for load switching applications



Contact & Relay Ratings		GL41A	GL41B	GL41C
Contact Form		A	B	C
Contact Arrangement		SPST-NO	SPST-NC	SPDT
Voltage, Test Max. [kV Peak] (30µA Leakage Max., dc or 50Hz)		6	6	6
Voltage, Operating Max. [kV Peak]	dc or 50Hz	5	5	5
	2.5MHz	4.5	4.5	4.5
	16MHz	3.5	3.5	3.5
	32MHz	2.8	2.8	2.8
Current, Continuous Carry Max [Amps]	dc or 50Hz	30	30	30
	2.5MHz	24	24	24
	16MHz	16	16	16
	32MHz	12	12	12
Coil Hi-Pot (V RMS, 50 Hz) [V]		500	500	500
Capacitance [pF]	Across Open Contacts	1.2	1.2	1.2
	Contacts to Ground	1.2	1.2	1.2
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.02	0.02	0.02
Operate Time, Max [ms]		10	10	10
Release Time, Max [ms]		10	10	10
Life, Mechanical [Cycles]		1million	1million	1million
Weight [g(oz)]		28(1)	28(1)	28(1)
Vibration (Sine 10-500Hz Peak) [G's]		10	10	10
Shock (11ms 1/2 Sine Peak) [G's]		50	50	50
Temperature Ambient Operating [°C]		-55~125	-55~125	-55~125

COIL RATINGS				
Nominal, Volts dc [Vdc]	12	26.5	115	
Pick-up, Volts dc, Max. [Vdc]	8	16	80	
Drop-Out, Volts dc [Vdc]	0.5-5	1-10	5-50	
Coil Resistance (Ohms ±10%) [Ω ±10%]	70	290	4700	

* Ratings listed are for 25° C, sea level conditions.

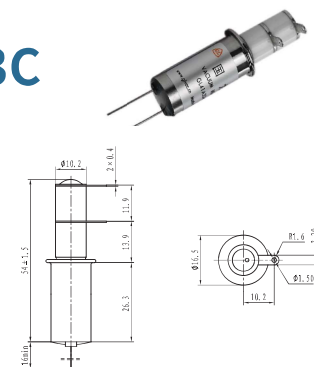
GL41	A	3	3	4
Contact Arrangement A=SPST-NO B=SPST-NC C=SPDT				
Coil Voltage 2 = 12 Vdc, Inserting 3 = 26.5 Vdc, Inserting 5 = 115 Vdc, Inserting 7 = 12 Vdc, Turret Terminal 8 = 26.5 Vdc, Turret Terminal 9 = 115 Vdc, Turret Terminal				
High Voltage Connection 3= Solder Connection				
Mounting 2 = Flanged 4 = Standard				

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GL43A GL43B GL43C

FEATURES:

- Slim design is extremely space efficient in multi-relay applications
- RF efficient design offers high power handling in a small package
- Durable tungsten contacts for hot load switching
- Vacuum dielectric for effective arc quenching when opening under load
- Can be mounted and used in any position
- Contact GL for load switching applications



Contact & Relay Ratings		GL43A	GL43B	GL43C
Contact Form		A	B	C
Contact Arrangement		SPST-NO	SPST-NC	SPDT
Voltage, Test Max. [kV Peak] (30µA Leakage Max., dc or 50Hz)		11	11	11
Voltage, Operating Max. [kV Peak]	dc or 50Hz	10	0	10
	2.5MHz	7	7	7
	16MHz	6	6	6
	32MHz	4	4	4
Current, Continuous Carry Max [Amps]	dc or 50Hz	25	25	25
	2.5MHz	20	20	20
	16MHz	13	13	13
	32MHz	10	10	10
Coil Hi-Pot (V RMS, 50 Hz) [V]		500	500	500
Capacitance [pF]	Across Open Contacts	1.2	1.2	1.2
	Contacts to Ground	1.2	1.2	1.2
Resistance, Contact Max (1A, 2 V dc) [ohms]		0.02	0.02	0.02
Operate Time, Max [ms]		10	10	10
Release Time, Max [ms]		10	10	10
Life, Mechanical [Cycles]		1million	1million	1million
Weight [g(oz)]		28(1)	28(1)	28(1)
Vibration (Sine 55-2000Hz Peak) [G's]		10	10	10
Shock (11ms 1/2 Sine Peak) [G's]		50	50	50
Temperature Ambient Operating [°C]		-55~125	-55~125	-55~125

COIL RATINGS				
Nominal, Volts dc [Vdc]	12	26.5	115	
Pick-up, Volts dc, Max. [Vdc]	8	16	80	
Drop-Out, Volts dc [Vdc]	0.5-5	1-10	5-50	
Coil Resistance (Ohms ±10%) [Ω ±10%]	70	290	4700	

* Ratings listed are for 25° C, sea level conditions.

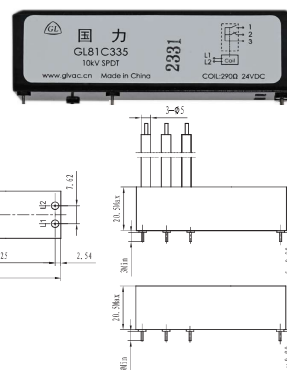
GL41	A	3	3	4
Contact Arrangement A=SPST-NO B=SPST-NC C=SPDT				
Coil Voltage 2 = 12 Vdc, Inserting 3 = 26.5 Vdc, Inserting 5 = 115 Vdc, Inserting 7 = 12 Vdc, Turret Terminal 8 = 26.5 Vdc, Turret Terminal 9 = 115 Vdc, Turret Terminal				
High Voltage Connection 3= Solder Connection				
Mounting 2 = Flanged 4 = Standard				

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GL81C

FEATURES:

- The smallest 10kV high power relay
- Four standard configuration, wide applicability
- All PCB pin or flying lead connection provides mounting and connection versatility
- Durable tungsten contacts for hot load switching
- Vacuum dielectric for effective arc quenching when opening under load
- Contact GL for load switching applications



Contact & Relay Ratings		GL81C
Contact Form		C
Contact Arrangement		SPDT
Voltage, Test Max. [kV Peak] (30µA Leakage Max., dc or 50Hz)		11
Voltage, Operating Max. [kV Peak]	dc or 50Hz	10
	2.5MHz	-
Contacts & to Base (15µA Leakage Max.)	16MHz	-
	32MHz	-
Current, Continuous Carry Max [Amps]	dc or 50Hz	5, 10
	2.5MHz	-
	16MHz	-
	32MHz	-
Coil Hi-Pot (V RMS, 50 Hz) [V]		NA
Capacitance [pF]	Across Open Contacts	-
	Contacts to Ground	-
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.05
Operate Time, Max [ms]		10
Release Time, Max [ms]		10
Life, Mechanical [Cycles]		1million
Weight [g(oz)]		70(2.5)
Vibration (Sine 10-500Hz Peak) [G' s]		10
Shock (11ms 1/2 Sine Peak) [G' s]		30
Temperature Ambient Operating [°C]		-55~85

COIL RATINGS			
Nominal, Volts dc [Vdc]	12	26.5	115
Pick-up, Volts dc, Max. [Vdc]	8	16	80
Drop-Out, Volts dc [Vdc]	0.5-5	1-10	5-50
Coil Resistance (Ohms ±10%) [Ω±10%]	70	290	4700

*Ratings listed are for 25° C, sea level conditions.

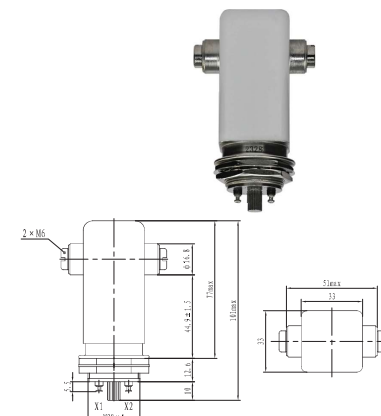
GL81	C	3	3	5
Contact Arrangement C=SPDT				
Coil Voltage 2 = 12 Vdc, Inserting 3 = 26.5 Vdc, Inserting 5 = 115 Vdc, Inserting				
High Voltage Connection 3= Solder Connection 4=Flying Lead				
Mounting 5=PCB Pin				

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GL20 GL30

FEATURES:

- Non-load switch, carry large current
- Non-vacuum medium, low contact resistance



Contact & Relay Ratings		GL20	GL30
Contact Form		A	B
Contact Arrangement		SPST-NO	SPST-NC
Voltage, Test Max. [kV Peak] (15µA Leakage Max., dc or 60Hz)		30	28
Voltage, Operating Max. [kV Peak]	dc or 50Hz	28	28
	2.5MHz	22	22
Contacts & to Base (15µA Leakage Max.)	16MHz	12	10
	32MHz	10	9
Current, Continuous Carry Max [Amps]	dc or 50Hz	110	55
	2.5MHz	60	30
	16MHz	40	20
	32MHz	30	15
Coil Hi-Pot (V RMS, 60 Hz) [V]		500	500
Capacitance [pF]	Across Open Contacts	2.5	2.5
	Contacts to Ground	2.5	2.5
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.005	0.01
Operate Time, Max [ms]		18	18
Release Time, Max [ms]		10	10
Life, Mechanical [Cycles]		2million	2million
Weight [g(oz)]		330	330
Vibration (Sine 55-500Hz Peak) [G' s]		10	10
Shock (11ms 1/2 Sine Peak) [G' s]		30	30
Temperature Ambient Operating [°C]		-55~125	-55~125

COIL RATINGS			
Nominal, Volts dc [Vdc]	24	26.5	
Pick-up, Volts dc, Max. [Vdc]	16	16	
Drop-Out, Volts dc [Vdc]	1-10	1-10	
Coil Resistance (Ohms ±10%) [Ω±10%]	120	120	

*Ratings listed are for 25° C, sea level conditions.

GL20	W	P	26.5V dc
High Voltage Connection W=Screw			
Mounting P=Through Panel			
Coil Voltage 326.5V dc=26.5V dc Terminal Type			

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GLH1 GLH3 GLH5 (JPK-123 JPK-124)

FEATURES:

- Small size, 3.5kV
- Screw type, easy to install
- Coil can be replaced by the user to diversify the function of the product
- Contact GL for load switching applications

GLH1 Non-load Switching

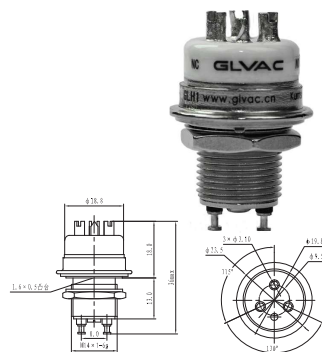
Low stable contact resistance
High carry current, 25Adc continuous,
in a small package

GLH3 Make & Break Load Switching

Durable tungsten contacts for hot load switching
Vacuum dielectric for effective arc quenching
when opening under load

GLH5 Make Only Load Switching

Excellent for capacitor discharge and safety unload
switch applications
Strong use ability, can be installed on a small device



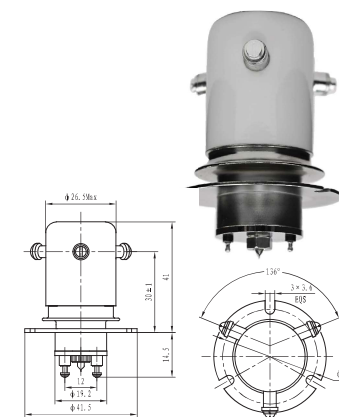
Contact & Relay Ratings		GLH1	GLH3	GLH5
Contact Form		C	C	C
Contact Arrangement		SPDT	SPDT	SPDT
Voltage, Test Max. [kV Peak] (30µA Leakage Max., dc or 50Hz)		5	5	5
Voltage, Operating Max. [kV Peak]	dc or 50Hz	3.5	3.5	3.5
	2.5MHz	2.5	-	-
	16MHz	2	-	-
Contacts & to Base (30µA Leakage Max.)	32MHz	1	-	-
	dc or 50Hz	25	18	8
	2.5MHz	14	-	-
Current, Continuous Carry Max [Amps]	16MHz	9	-	-
	32MHz	7	-	-
Coil Hi-Pot (V RMS, 50 Hz) [V]		500	500	500
Capacitance [pF]	Across Open Contacts	2	2	2
	Contacts to Ground	2.5	2.5	2.5
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.01	0.02	0.05
Operate Time, Max [ms]		6	6	6
Release Time, Max [ms]		6	6	6
Life, Mechanical [Cycles]		2million	2million	1million
Weight [g(oz)]		30	30	30
Vibration (Sine 55-2000Hz Peak) [G' s]		10	10	10
Shock (11ms 1/2 Sine Peak) [G' s]		30	30	30
Temperature Ambient Operating [°C]		-55~125	-55~125	-55~125

* Order the relay with the coil voltage in the part number as shown above. The coil voltage will appear on the coil plate near the coil terminals rather than in the P/N on the relay.

GL2

FEATURES:

- High carry current, 50Adc continuous, in a small package
- Low stable contact resistance minimizes loss in RF circuits
- Solder or threaded high voltage connections for simple installation
- Replaceable coil, diversify product functions
- Contact GL for load switching applications



Contact & Relay Ratings		GL2
Contact Form		C
Contact Arrangement		SPDT
Voltage, Test Max. [kV Peak] (15µA Leakage Max., dc or 50Hz)		15
Voltage, Operating Max. [kV Peak]	dc or 50Hz	15
	2.5MHz	12
	16MHz	9
Contacts & to Base (15µA Leakage Max.)	32MHz	7
	dc or 50Hz	50
	2.5MHz	30
Current, Continuous Carry Max [Amps]	16MHz	17
	32MHz	10
Coil Hi-Pot (V RMS, 50 Hz) [V]		500
Capacitance [pF]	Across Open Contacts	0.5
	Contacts to Ground	1
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.012
Operate Time, Max [ms]		15
Release Time, Max [ms]		9
Life, Mechanical [Cycles]		1million
Weight [g(oz)]		84(3)
Vibration (Sine 50-500Hz Peak) [G' s]		10
Shock (11ms 1/2 Sine Peak) [G' s]		50
Temperature Ambient Operating [°C]		-55~125

*Order the relay with the part number as shown. The latching "L" designator and the coil voltage will not appear in the P/N on the relay but will be indicated on the label that is on the base of the relay.

COIL RATINGS				
Nominal, Volts dc [Vdc]	12	26.5	115	
Pick-up, Volts dc, Max. [Vdc]	8	16	80	
Drop-Out, Volts dc [Vdc]	1-4	2-8	10-40	
Coil Resistance (Ohms ±10%) [Ω±10%]	80	335	6000	

*Ratings listed are for 25° C, sea level conditions.

GLH	1	-12V dc
Model		
1		
2		
3		
Coil Voltage		
2 = 12 Vdc, Inserting		
3 = 26.5 Vdc, Inserting		
5 = 115 Vdc, Inserting		

COIL RATINGS				
Nominal, Volts dc [Vdc]	12	26.5	115	
Pick-up, Volts dc, Max. [Vdc]	8	16	80	
Drop-Out, Volts dc [Vdc]	0.5-5	1-10	5-50	
Coil Resistance (Ohms ±10%) [Ω±10%]	60	250	3500	

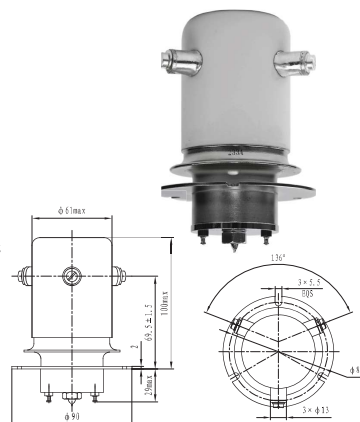
*Ratings listed are for 25° C, sea level conditions.

GL2	S	F	-12V dc
High Voltage Connection			
S = Solder Pot			
W = Screw			
Mounting			
F = Flange			
P = Through Panel			
Coil Voltage			
Blank= 26.5 Vdc			
12V dc=12V dc			
115V dc=115V dc			

GL52 (JPK-6)

FEATURES:

- High carry current, 50Adc continuous, in a small package
- Low stable contact resistance minimizes loss in RF circuits
- Threaded high voltage connector for simple installation



Contact & Relay Ratings		GL52
Contact Form		C
Contact Arrangement		SPDT
Voltage, Test Max. [kV Peak] (30μA Leakage Max., dc or 50Hz)		28
Voltage, Operating	dc or 50Hz	25
	Max. [kV Peak]	2.5MHz
Contacts & to Base (30μA Leakage Max.)	16MHz	10
	32MHz	8
Current, Continuous	dc or 50Hz	150
	2.5MHz	70
	16MHz	45
	32MHz	30
Coil Hi-Pot (V RMS, 50 Hz) [V]		500
Capacitance [pF]	Across Open Contacts	5
	Contacts to Ground	5
Resistance, Contact Max (1A, 28 V dc) [ohms]		0.005
Operate Time, Max [ms]		100
Release Time, Max [ms]		15
Life, Mechanical [Cycles]		1million
Weight [g(oz)]		1400
Vibration (Sine 10-55Hz Peak) [G' s]		10
Shock (11ms 1/2 Sine Peak) [G' s]		30
Temperature Ambient Operating [°C]		-55-125

COIL RATINGS		
Nominal, Volts dc [Vdc]	12	26.5
Pick-up, Volts dc, Max. [Vdc]	8	16
Drop-Out, Volts dc [Vdc]	0.5-5	1-10
Coil Resistance (Ohms ±10%) [Ω ±10%]	15	60

*Ratings listed are for 25° C, sea level conditions.

GL52	S	F	-12V dc
High Voltage Connection W=Screw			
Mounting F = Flange			
Coil Voltage Blank=26.5V dc Turret Terminal 12V dc=12V dc Turret Terminal			

*Order the relay with the part number as shown. The latching "L" designator and the coil voltage will not appear in the P/N on the relay but will be indicated on the label that is on the base of the relay.