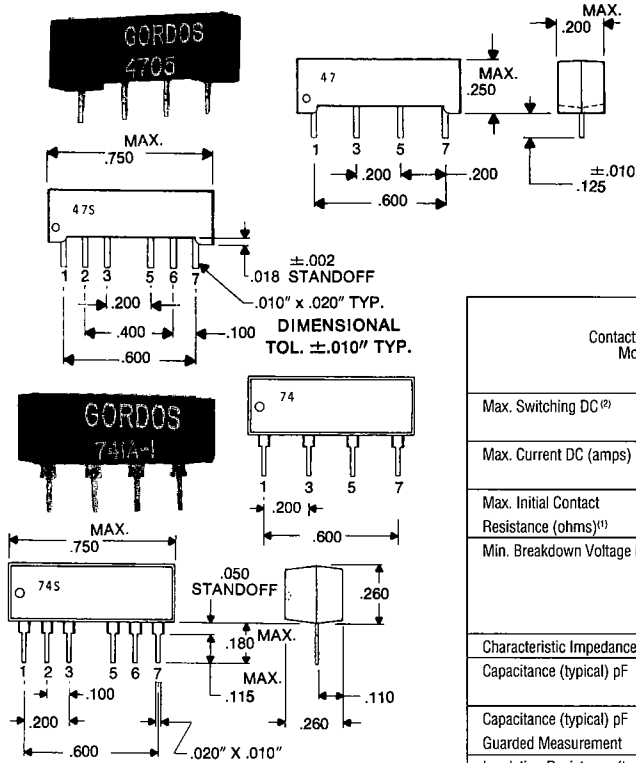


# GORDOS

## REED RELAYS

### 47 SERIES MINI-SIP DRY REED RELAY 74 SERIES SIP DRY REED RELAY



	Series 47/74	Series 74
Nominal Coil Voltage DC	5	12
Must Operate Voltage DC	3.8	9.0
Must Release Voltage DC	0.5	1.2
Maximum Voltage DC (3)	10	20

### FEATURES:

- These Gordos Relays are molded in semiconductor-grade molding compounds that meet Underwriters Laboratories 94V-0 flammability rating.
- RF Characteristics
  - Insertion Loss: 0.3 dB max from 1 to 500 MHz
  - Isolation: 30 dB min. from 1 to 600 MHz
  - Characteristic Impedance: 50 ohms
- Compatible with automatic insertion
- Logic Compatible

Contact Arrangement Model Type		1 Form-A	(3) 1 Form-B	1 Form-C	Coaxially Shielded 1 Form-A Versions for RF Switching
		47/741A	741B	741C	4705S 4712S 741AS
Max. Switching DC <sup>(2)</sup>	Watts	10	10	3	10
	Volts	200	200	30	200
Max. Current DC (amps)	Switch	0.5	0.5	0.2	0.5
	Carry	1.5	1.5	0.5	1.5
Max. Initial Contact Resistance (ohms) <sup>(1)</sup>	47	0.100	—	—	0.100
	74	0.200	0.200	250	0.200
Min. Breakdown Voltage DC	Across Contacts	250	250	200	250
	Contact to Shield	—	—	—	750
	Contact to Coil	750	750	750	750
	Shield to Coil	—	—	—	500
Characteristic Impedance (typical) Ohms		—	—	—	50
Capacitance (typical) pF	Across Contacts	1.0	—	2.0	0.6
	Contact to Coil	2.0	3.8	2.0	1.5
Capacitance (typical) pF Guarded Measurement	Across Contacts	—	—	—	0.1
	Contact to Coil	—	—	—	0.3
Insulation Resistance (typical) Ohms at 25° C 50% R.H.	47	10 <sup>10</sup>	—	10 <sup>8</sup>	10 <sup>10</sup>
	74	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>8</sup>	10 <sup>10</sup>
Operate Time (typical mSec) Including Bounce		0.5	0.5	1.0	0.5
Release Time (typical mSec) Diode Suppressed		0.3	0.5	1.5 includes Bounce on N.C. Pole	0.3

Operating temp range -20° C to 85° C Storage temp range -20° C to 100° C

### REED RELAY SELECTION CHART SERIES 47 MINI-SIP

Shading denotes shortest lead time items.

### SERIES 74 SIP

Nom. Coil Volt.	Coil Res. Ohms ±10%	Clamp Diode	Part Number	Contact Arrangement Schematic (Side View)	Nom. Coil Volt.	Coil Res. Ohms ±10%	Clamp Diode	Part Number	Contact Arrangement Schematic (Side View)	Nom. Coil Volt.	Coil Res. Ohms ±10%	Clamp Diode	Part Number	Contact Arrangement Schematic (Side View)
5	500	No	4705		5	380	No	741A-1 741A-2		5	500	No	741B-9 741B-10	
		Yes	4705D					500			Yes	741A-9 741A-10		
12	1200	No	4712		12	1000	No	741A-3 741A-4		12	500	No	741B-7 741B-8	
		Yes	4712D					1750			Yes	741A-7 741A-8		
5	380	No	4705-S		5	500	No	741AS-9 741AS-10		5	200	No	741C-1 741C-2	
								500			Yes	741AS-3 741AS-4		
12	800	No	4712-S		12	1000	No	741AS-3 741AS-4		12	500	No	741C-3 741C-4	
								1750			Yes	741AS-3 741AS-4		

Notes: All specifications are based on a 25° C ambient temperature.

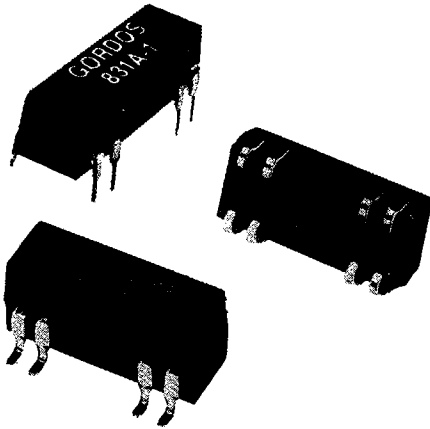
1. Measured with nominal coil voltage applied (except Form B).
2. Higher voltages and/or current may be switched with life expectancy reduced.
3. Excessive voltage (maximum of 6.5 VDC for 5 VDC model, 15 VDC for 12 VDC model, and 28 VDC for 24 model), may cause contact reclosure on Form B models.

Products and specifications subject to change without notice.  
Consult factory for application assistance.

# GORDOS

## REED RELAYS

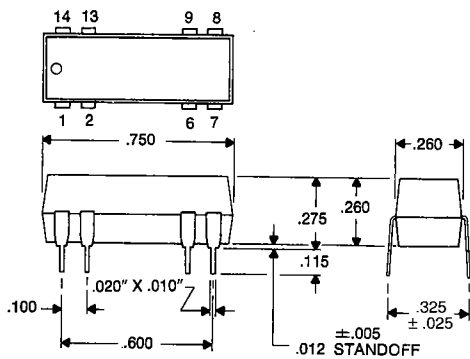
### 83 SERIES MOLDED DIP THRU-HOLE AND SURFACE MOUNT DRY REED RELAYS



#### FEATURES:

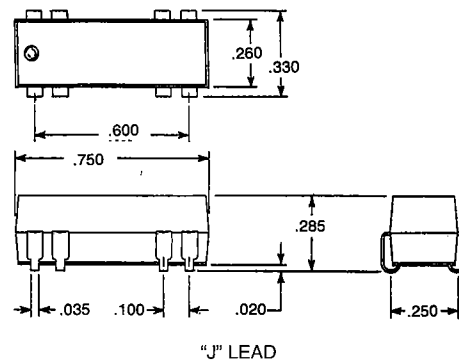
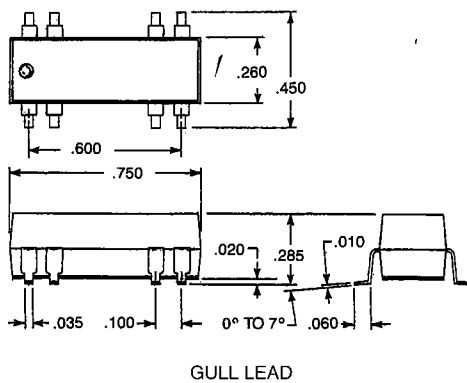
- Choice of Gull or J-Lead Surface Mount or Thru-hole Configuration
- Surface Mount Versions Pass High Reliability Steam Aging Solderability Test
- Surface Mount Versions Compatible with IR Reflow Systems
- 94V-O Flammability Rating
- Form A, 2A, B or C Contacts
- Logic Compatible 5, 12 or 24 Volt Operation
- Available with or without Diodes
- Compatible with Automatic Insertion
- Semiconductor Grade Molding Compounds
- -20° C to 85° C Operating, -20° C to 100° C Storage Temperature Ranges

#### THRU-HOLE



(DIMENSIONAL TOL.  $\pm .010$ " TYP.)

#### THRU-HOLE



Products and specifications subject to change without notice.  
Consult factory for application assistance.

# GORDOS

## REED RELAYS

### 83 SERIES MOLDED DIP THRU-HOLE AND SURFACE MOUNT DRY REED RELAYS

Nominal Coil Voltage DC	5	12	24
Must Operate Voltage DC	3.8	9.0	18.0
Must Release Voltage DC	0.5	1.2	2.4
Maximum Voltage DC (3)	10	20	35

Contact Arrangement		1 Form-A		(3) Form-B	Form-C		
Model Type		831A	832A	831B	831C	835C	836C
Max. Switching DC <sup>(2)</sup>	Watts	10		10	3		
	Volts	200		200	30		
Max. Current DC (amps)	Switch	0.5		0.5	0.2		
	Carry	1.5		1.5	0.5		
Max. Initial Contact Resistance (ohms) <sup>(1)</sup>		0.200		0.200	0.200		
Min. Breakdown Voltage DC	Across Contacts	250		250	200		
	Contact to Coil	750		750	750		
	Across Contacts	1.0		—	1.5		
Capacitance (typical) pF	Across Contacts	2.0		3.8	2.0		
	Contact to Coil	10 <sup>10</sup>		10 <sup>10</sup>	10 <sup>8</sup>		
Operate Time (typical mSec) Including Bounce Except Form-B		0.5		0.5	1.0		
Release Time (typical mSec) Diode Suppressed		0.5		0.5	1.5 includes Bounce on N.C. Pole		

### REED RELAY SELECTION CHART SERIES 83 DIP

Shading denotes shortest lead time items.

Contact Arrangement	Nominal Coil Voltage (VDC)	Coil Resistance (ohms) ± 10% @ 25° C	Suppression Diode	Catalog Number			Schematics (Top View)
				Thru-Hole	Gull-Lead	J-Lead	
1A SPST N.O.	5	380	No	831A-1	831A-1G	831A-1J	
			Yes	831A-2	831A-2G	831A-2J	
	12	500	No	831A-3	831A-3G	831A-3J	
			Yes	831A-4	831A-4G	831A-4J	
	24	1000	No	831A-5	831A-5G	831A-5J	
			Yes	831A-6	831A-6G	831A-6J	
24	1750	No	831A-7	831A-7G	831A-7J		
		Yes	831A-8	831A-8G	831A-8J		
1B (See Note 3) SPST N.C.	5	500	No	831B-3	831B-3G	831B-3J	
			Yes	831B-4	831B-4G	831B-4J	
	12	500	No	831B-5	831B-5G	831B-5J	
			Yes	831B-6	831B-6G	831B-6J	
	24	1750	No	831B-7	831B-7G	831B-7J	
			Yes	831B-8	831B-8G	831B-8J	
1C SPDT	5	200	No	831C-1	831C-1G	831C-1J	
			Yes	831C-2	831C-2G	831C-2J	
	12	500	No	831C-3	831C-3G	831C-3J	
			Yes	831C-4	831C-4G	831C-4J	
	24	1750	No	831C-5	831C-5G	831C-5J	
			Yes	831C-6	831C-6G	831C-6J	
1C SPDT	5	200	No	835C-1	835C-1G	835C-1J	
			Yes	835C-2	835C-2G	835C-2J	
	12	500	No	835C-3	835C-3G	835C-3J	
			Yes	835C-4	835C-4G	835C-4J	
	24	1750	No	835C-5	835C-5G	835C-5J	
			Yes	835C-6	835C-6G	835C-6J	
1C SPDT	5	200	No	836C-1	836C-1G	836C-1J	
			Yes	836C-2	836C-2G	836C-2J	
	12	500	No	836C-3	836C-3G	836C-3J	
			Yes	836C-4	836C-4G	836C-4J	
	24	2200	No	836C-5	836C-5G	836C-5J	
			Yes	836C-6	836C-6G	836C-6J	
2A DPST N.O.	5	200	No	832A-1	832A-1G	832A-1J	
			Yes	832A-2	832A-2G	832A-2J	
	12	500	No	832A-3	832A-3G	832A-3J	
			Yes	832A-4	832A-4G	832A-4J	
	24	1750	No	832A-5	832A-5G	832A-5J	
			Yes	832A-6	832A-6G	832A-6J	

Notes: All specifications are based on a 25° C ambient temperature.

1. Measured with nominal coil voltage applied (except Form B).
2. Higher voltages and/or current may be switched with life expectancy reduced.
3. Excessive voltage (maximum of 6.5 VDC for 5 VDC model, 15 VDC for 12 VDC model, and 28 VDC for 24 model), may cause contact reclosure on Form B models.

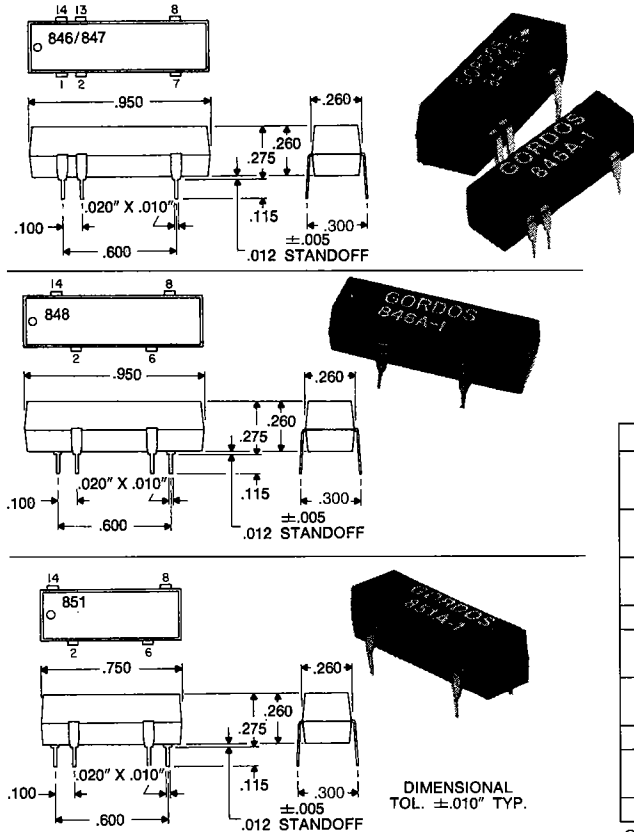
Products and specifications subject to change without notice.  
Consult factory for application assistance.

1000 N. SECOND ST., ROGERS, AR 72756 USA / TEL: 800-643-3500 / 501-636-5000 / FAX: 501-636-2305

# GORDOS

## REED RELAYS

### 846 SERIES HIGH VOLTAGE / 847 SERIES MERCURY WETTED 848 SERIES HIGH VOLTAGE & HIGH ISOLATION / 851 SERIES HIGH ISOLATION



#### FEATURES:

- These Gordos Relays are molded in semiconductor-grade molding compounds that meet Underwriters Laboratories 94V-0 flammability rating.
- Compatible with automatic insertion
- Logic Compatible
- High voltage contacts recommended for FCC Part 68 use

Nominal Coil Voltage DC	5	12	24
Must Operate Voltage DC	4.0	9.0	18.0
Must Release Voltage DC	0.5	1.2	2.4
Maximum Voltage DC (3)	10	20	35

Contact Arrangement		Form-A				Form-C
Model Type		846A	Mercury Wetted (4) 847A	848A	851A	Mercury Wetted (3) 847C
Max. Switching DC <sup>(2)</sup>	Watts	25	50	25	10	50
	Volts	1000	500	1000	200	500
Max. Current DC (amps)	Switch	1.0	1.0	1.0	0.5	1.0
	Carry	2.0	2.0	2.0	1.5	2
Max. Initial Contact Resistance (ohms) <sup>(1)</sup>		0.200	0.150	0.200	0.200	0.150
Min. Breakdown Voltage DC	Across Contacts	1000	1000	1000	500	1000
	Contact to Coil	1500	1500	2500	2000	1000
Capacitance (typical) pF	Across Contacts	1	1.1	1	1	1.3
	Contact to Coil	2	2	2	2	6
Insulation Resistance (typical ohms)		10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>9</sup>
Operate Time (typical mSec) Including Bounce Except Form-B		0.5	2.5	0.5	0.5	2.5
Release Time (typical mSec) Diode Suppressed		0.3	2.0	0.3	0.3	2.0

Operating temp range -20° C to 85° C Storage temp range -20° C to 100° C

#### REED RELAY SELECTION CHART

##### 6 PIN DIP RELAYS

##### 846 SERIES HIGH VOLTAGE

##### 847 SERIES MERCURY WETTED

##### 4 PIN DIP RELAYS

##### 848 SERIES HIGH VOLTAGE, HIGH ISOLATION

##### 851 SERIES HIGH ISOLATION

Contact Arrangement	Nom. Coil Volt.	Coil Res. Ohms ±10%	Clamp Diode	Part Number	Schematic (Top View)	Contact Arrangement	Nom. Coil Volt.	Coil Res. Ohms ±10%	Clamp Diode	Part Number	Schematic (Top View)	
1A SPST N.O.	5	150	No	846A-1 846A-2			1A SPST N.O.	5	150	No		848A-1
	12	500	No	846A-3 846A-4			12	500	No	848A-3		
	24	1750	No	846A-5 846A-6			24	1750	No	848A-4		
	5	150	No	847A-1 847A-2			24	1750	Yes	848A-5 848A-6		
	12	500	No	847A-3 847A-4			5	150	No	851A-1		
	24	1750	No	847A-5 847A-6			5	150	Yes	851A-2		
1C SPDT	5	70	No	847C-1 847C-2			12	500	No	851A-3		
		12	320	No		847C-3 847C-4		12	500	Yes	851A-4	
		24	1600	No		847C-5 847C-6		24	1750	No	851A-7	
				Yes				24	1750	Yes	851A-8	

Notes: All specifications are based on a 25° C ambient temperature.

1. Measured with nominal coil voltage applied (except Form B).
2. Higher voltages and/or current may be switched with life expectancy reduced.
3. Mercury relays are position-sensitive and must be mounted within 30° from vertical, as indicated by the "up" arrow.

Products and specifications subject to change without notice.

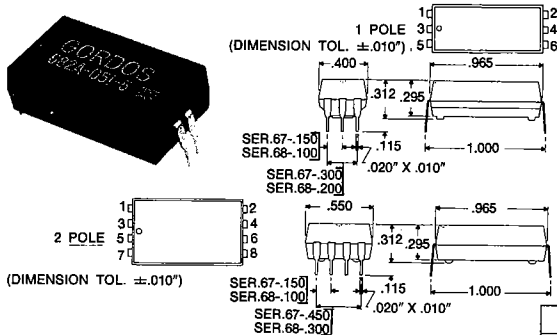
Consult factory for application assistance.

1000 N. SECOND ST., ROGERS, AR 72756 USA / TEL: 800-643-3500 / 501-636-5000 / FAX: 501-636-2305

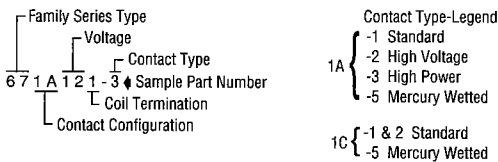
# GORDOS

## REED RELAYS

### 67 SERIES .150" X 1.000" / 68 SERIES .100" X 1.000" MIP DRY AND MERCURY WETTED



Nominal Coil Voltage DC	5	12	24
Must Operate Voltage DC	4.0	9.0	18.0
Must Release Voltage DC	0.5	1.2	2.4
Maximum Voltage DC (3)	10	20	35



#### FEATURES:

- All Gordos Relays are molded in semiconductor-grade molding compounds that meet Underwriters Laboratories 94V-0 flammability rating.
- Dry reed, high-voltage, high-power, and mercury wetted versions available.
- High voltage contacts recommended for FCC Part 68 use
- Logic Compatible
- Replaces Gordos 65/66 Series Reed Relays

Contact Arrangement	Model Type	Form-A				Form-C	
		-1	-2	-3	-5	-1	-5
Max. Switching DC <sup>(2)</sup>	Watts	10	25	50	50	3	50
	Volts	200	1000	220	500	30	500
Max. Current DC (amps)	Switch	0.500	1.0	3.0	1.0	0.200	1.0
	Carry	2.0	2.0	5.0	2.0	0.500	2.0
Max. Initial Contact Resistance (ohms) <sup>(1)</sup>		0.200	0.200	0.200	0.150	0.200	0.150
Min. Breakdown Voltage DC	Across Contacts	250	1000	400	1000	200	1000
	Contact to Coil	1000	1000	1000	1000	1000	1000
Capacitance (typical) pF	Across Contacts	1.0	1.0	1.0	1.1	1.5	1.3
	Contact to Coil	2.0	2.0	2.0	2.0	2.0	6.0
Insulation Resistance (typical ohms)		10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>8</sup>
Operate Time (typical mSec) Including Bounce Except Form-B		0.5	0.5	3.0	2.5	1.0	2.5
Release Time (typical mSec) Diode Suppressed		0.3	0.3	1.0	2.0	1.5	2.0

Operating temp range -20° C to 85° C Storage temp range -20° C to 100° C

#### REED RELAY SELECTION CHART

Shading denotes shortest lead time items. (To specify diode add "D" after part number. All schematics show location of diode)

Contact Arrangement	Contact Arrangement	Coil Res. Ohms ±10%	Part Number End Terminated	Schematic (Top View)	Contact Arrangement	Contact Arrangement	Coil Res. Ohms ±10%	Part Number End Terminated	Schematic (Top View)
1A Standard SPST N.O.	5 12 24	500 1200 2400	671A051-1 671A121-1 671A241-1	Orientation Arrows are for Mercury Wetted Models Only (See Note: 3)	1A Standard SPST N.O.	5 12 24	500 1200 2400	671A052-1 671A122-1 671A242-1	Orientation Arrows are for Mercury Wetted Models Only (See Note: 3)
1A High Volt. SPST N.O.	5 12 24	200 1000 2150	671A051-2 671A121-2 671A241-2		1A High Volt. SPST N.O.	5 12 24	200 1000 2150	671A052-2 671A122-2 671A242-2	
1A High Power SPST N.O.	5 12 24	200 575 2150	671A051-3 671A121-3 671A241-3		1A High Power SPST N.O.	5 12 24	200 575 2150	671A052-3 671A122-3 671A242-3	
1A Mercury Wetted SPST N.O.	5 12 24	200 800 2200	671A051-5 671A121-5 671A241-5		1A Mercury Wetted SPST N.O.	5 12 24	200 800 2200	671A052-5 671A122-5 671A242-5	
2A Standard DPST N.O.	5 12 24	200 800 2150	672A051-1 672A121-1 672A241-1		2A Standard DPST N.O.	5 12 24	200 800 2150	672A052-1 672A122-1 672A242-1	
2A High Volt. DPST N.O.	5 12 24	125 350 1500	672A051-2 672A121-2 672A241-2		2A High Volt. DPST N.O.	5 12 24	125 350 1500	672A052-2 672A122-2 672A242-2	
2A High Power DPST N.O.	5 12 24	75 350 1500	672A051-3 672A121-3 672A241-3		2A High Power DPST N.O.	5 12 24	75 350 1500	672A052-3 672A122-3 672A242-3	
2A Mercury Wetted DPST N.O.	5 12 24	75 300 1300	672A051-5 672A121-5 672A241-5		2A Mercury Wetted DPST N.O.	5 12 24	75 300 1300	672A052-5 672A122-5 672A242-5	
1C Standard SPDT	5 12 24	380 1200 2400	671C051-1 671C121-1 671C241-1		1C Standard DPST	5 12 24	380 1200 2400	671C052-1 671C122-1 671C242-1	
1C Mercury Wetted SPDT	5 12 24	70 320 1600	671C051-5 671C121-5 671C241-5		1C Mercury Wetted DPST	5 12 24	70 320 1600	671C052-5 671C122-5 671C242-5	
2C DPDT	5 12 24	100 500 1500	672C051-1 672C121-1 672C241-1						

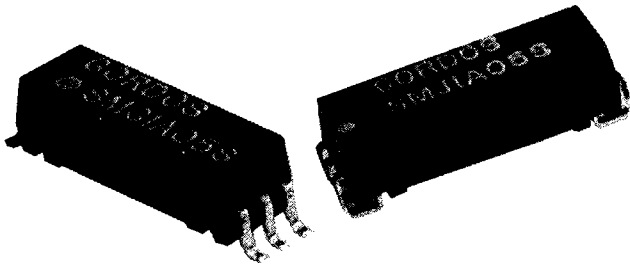
Notes: All specifications are based on a 25° C ambient temperature.  
 1. Measured with nominal coil voltage applied (except Form B).  
 2. Higher voltages and/or current may be switched with life expectancy reduced.  
 3. Mercury relays are position-sensitive and must be mounted within 30° from vertical, as indicated by the "up" arrow.

Products and specifications subject to change without notice.  
 Consult factory for application assistance.

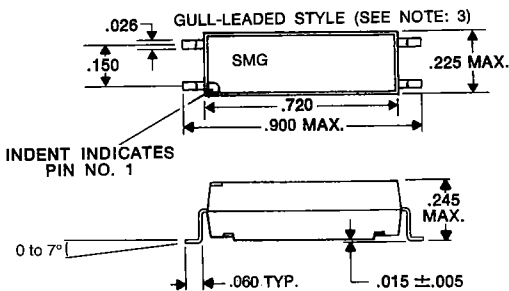
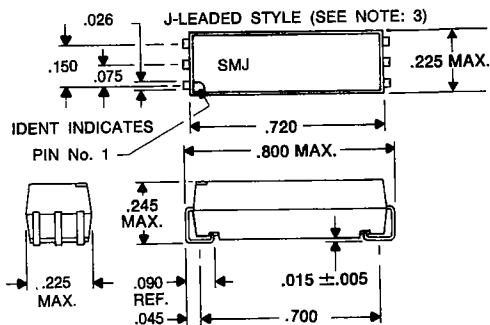
# GORDOS

## REED RELAYS

### SM SERIES SURFACE MOUNT



Nominal Coil Voltage DC	5	12
Must Operate Voltage DC	4.0	9.6
Must Release Voltage DC	0.5	1.2
Maximum Voltage DC (3)	10	20



- Notes: All specifications are based on a 25° C ambient temperature.
1. Measured with nominal coil voltage applied.
  2. Higher voltages and/or current may be switched with life expectancy reduced.
  3. Lead styles are available in all contact configurations and

### FEATURES:

- All Gordos Relays are molded in semiconductor-grade molding compounds that meet Underwriters Laboratories 94V-0 flammability rating.
- Withstand continuous exposure for 3 minutes at 215°
- RF Characteristics
  - Insertion Loss: 0.3 dB max from 1 to 500 MHz
  - Isolation: 30 dB min. from 1 to 600 MHz
  - Characteristic Impedance: 50 ohms

Contact Arrangement		Coaxially Shielded Versions for RF Switching		
Model Type		Standard 1A	Standard 1C	1A05-S 1A12-S
Max. Switching DC <sup>(2)</sup>	Watts	10	3	10
	Volts	200	30	200
Max. Current DC (amps)	Switch	0.5	0.2	0.5
	Carry	1.5	0.5	1.5
Max. Initial Contact Resistance (ohms) <sup>(1)</sup>		0.150	0.150	0.150
Min. Breakdown Voltage DC	Across Contacts	250	200	250
	Contact to Shield	~	~	500
	Contact to Coil	750	750	750
	Coil to Shield	~	~	1000
Characteristic Impedance (typical) ohms		~	~	50
Capacitance (typical) pF	Across Contacts	1.0	1.5	0.6
	Contact to Coil	2.0	2.0	1.5
Capacitance (typical) pF (guarded meas)	Across Contacts	~	~	0.1
	Contact to Coil	~	~	0.3
Insulation Resistance (typical ohms) @ 25° C 50% R.H.		10 <sup>14</sup>	10 <sup>9</sup>	10 <sup>8</sup>
Operate Time (typical mSec) Including Bounce		0.3	1.0	0.3
Release Time (typical mSec) Diode Suppressed		0.2	1.5	0.2

Operating temp range -20° C to 85° C Storage temp range -20° C to 100° C

### REED RELAY SELECTION CHART SM SERIES SURFACE MOUNT

Nom. Coil Volt.	Coil Res. Ohms ± 10%	Part Number	Contact Arrangement Schematic (Side View)
5	500	SMJ1A05 SMG1A05	STANDARD FORM-A 
12	1000	SMJ1A12 SMG1A12	
5	380	SMJ1A05-S SMG1A05-S	COAXIALLY SHIELDED FORM-A 
12	800	SMJ1A12-S SMG1A12-S	
5	150	SMJ1C05 SMG1C05	STANDARD FORM-C 
12	800	SMJ1C12 SMG1C12	

Products and specifications subject to change without notice.  
Consult factory for application assistance.

1000 N. SECOND ST., ROGERS, AR 72756 USA / TEL: 800-643-3500 / 501-636-5000 / FAX: 501-636-2305