

# G6S Relays

- True surface mount, low signal relay
- Unique multi-bend lead frame design
- Exceptional, long term solder joint reliability by means of longer leads
- Excellent solderability
- Advanced sealability tested to +290° and beyond
- Constructed entirely of high-temp materials
- Proven thermal cycling performance
- High dielectric strength that meets with FCC Part 68 and Bellcore surge and isolation requirements

State-of-the-Art  
SMT Design  
Industry Standard



*For today's high-reliability  
switching applications*

Made in the

**U.S.A.**

See back for product data

## Ordering Information:

Part Number	Rated Voltage (VDC)	Coil Resistance (Ohms)	Power (mW)	Contact Form	Type	
<b>G6S-2F</b>	-DC4.5	4.5 DC	145	140	DPDT	<ul style="list-style-type: none"> <li>• Surface Mount</li> <li>• Gull-wing Terminals</li> <li>• Fully Sealed</li> </ul>
	-DC5	5 DC	178	140	DPDT	
	-DC12	12 DC	1,028	140	DPDT	
	-DC24	24 DC	2,880	200	DPDT	
<b>G6S-2G</b>	-DC4.5	4.5 DC	145	140	DPDT	<ul style="list-style-type: none"> <li>• Surface Mount</li> <li>• Inside "L" Terminals</li> <li>• Fully Sealed</li> </ul>
	-DC5	5 DC	178	140	DPDT	
	-DC12	12 DC	1,028	140	DPDT	
	-DC24	24 DC	2,880	200	DPDT	
<b>G6S-2</b>	-DC4.5	4.5 DC	145	140	DPDT	<ul style="list-style-type: none"> <li>• PCB Terminals</li> <li>• Fully Sealed</li> </ul>
	-DC5	5 DC	178	140	DPDT	
	-DC12	12 DC	1,028	140	DPDT	
	-DC24	24 DC	2,880	200	DPDT	

## Specs:

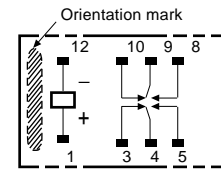
CONTACT DATA	
<b>Contact ratings</b>	0.5 A at 125 VAC 2 A at 30 VAC
<b>Maximum operating voltage</b>	250 VAC, 220 VDC
<b>Carry current</b>	2 A
<b>Maximum operating current</b>	2 A
<b>Maximum switching capacity</b>	62.5 VA, 60 W
<b>Minimum permissible load</b>	10 mVDC, 10 µA
COIL DATA	
<b>Pickup voltage</b>	75% max.
<b>Dropout voltage</b>	10% min.
<b>Maximum voltage</b>	200% at 23°C max.
CHARACTERISTIC DATA	
<b>Initial contact resistance</b>	75 mΩ max.
<b>Operate time</b>	4 ms max. (actual value: approx. 2.5 ms)
<b>Release time</b>	4 ms max. (actual value: approx. 1.5 ms)
<b>Insulation resistance</b>	1,000 MΩ min. (at 500 VDC)
<b>Dielectric strength</b>	2,000 VAC, 50/60 Hz for 1 minute between coil and contacts 1,500 VAC, 50/60 Hz for 1 minute between contacts of different poles 1,000 VAC, 50/60 Hz for 1 minute between contacts of same pole
<b>Surge withstand voltage</b>	2,500 V, 2 x 10 µs (conforms to Bellcore specs.) between coil and contacts and between contacts of different poles 1,500 V, 10 x 160 µs (conforms to FCC part 68) between contacts of same pole
<b>Ambient temperature</b>	-40° to 85°C
<b>Service life</b>	<i>Mechanical:</i> 100,000,000 operations min. (at operating frequency of 36,000 operations/hour) <i>Electrical:</i> 500,000 operations min. at 1A, 30 VDC
CONSTRUCTION DATA	
<b>Termination</b>	SMT gull-wing, SMT inside "L", PCB terminals
<b>Construction</b>	Fully-sealed
<b>Weight</b>	.07oz. (2g)
<b>Packaging method</b>	Tubes, tape & reel

## Cross Reference:

PART NUMBER	FTA			
	Aromat	Fujitsu	Takamisawa	NEC
Omron				
G6S-2-DC5 to 48	TX2-5V to 48V	FBR12ND05 to 48	NA-5 to 48W-K	EC2-5 to 48NU
G6S-2F-DC5 to 48	TX2SA-5V to 48V	-----	NAS-5 to 48W-K	EE2-5 to 48NU
G6S-2F-TR-DC5 to 48	TX2SA-5V to 48V-Z	FBR18ND05 to 48	-----	EE2-5 to 48NU-L
G6S-2G-DC5 to 48	TX2SS-5V to 48V	-----	-----	EE2-5 to 48NUN
G6S-2G-TR-DC5 to 48	TX2SS-5V to 48V-Z	FBR18ND05 to 48-M	-----	EE2-5 to 48NUN-L

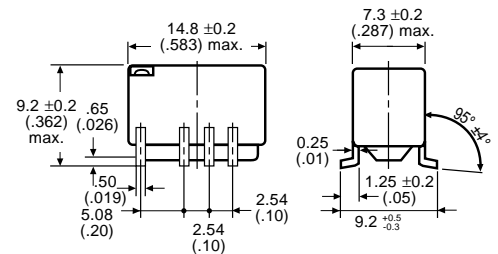
## Dimensions:

### Terminal Arrangement / Internal Connections

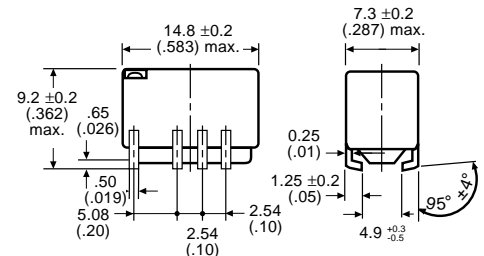


Top View

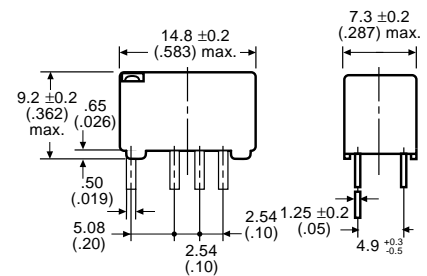
### G6S-2F



### G6S-2G



### G6S-2



### UNITED STATES SALES OFFICES

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Boston, MA	508.762.6400
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Philadelphia, PA	610.524.1897
Los Angeles, CA	805.583.5559
San Jose, CA	408.371.0200

### CANADA REGIONAL SALES OFFICES

Toronto	416.286.6465
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