OMRON®

G6S Relays

State-of-the-Art SMT Design Industry Standard

- 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



For today's high-reliability switching applications

Made in the

U.S.A.

See back for product data

OMRON®

Ordering Information:

Part Number		Rated Voltage (VDC)	Coil Resistance (Ohms)	Power (mW)	Contact Form	Type
G6S-2F	-DC4.5	4.5 DC	145	140	DPDT	• Surface Mount
	-DC5	5 DC	178	140	DPDT	• Gull-wing Terminals
	-DC12	12 DC	1,028	140	DPDT	• Fully Sealed
	-DC24	24 DC	2,880	200	DPDT	
G6S-2G	-DC4.5	4.5 DC	145	140	DPDT	• Surface Mount
	-DC5	5 DC	178	140	DPDT	• Inside "L" Terminals
	-DC12	12 DC	1,028	140	DPDT	• Fully Sealed
	-DC24	24 DC	2,880	200	DPDT	
G6S-2	-DC4.5	4.5 DC	145	140	DPDT	• PCB Terminals
	-DC5	5 DC	178	140	DPDT	• Fully Sealed
	-DC12	12 DC	1,028	140	DPDT	
	-DC24	24 DC	2,880	200	DPDT	

Specs:

CONTACT DATA	
Contact ratings	0.5 A at 125 VAC 2 A at 30 VAC
Maximum operating voltage	250 VAC, 220 VDC
Carry current	2 A
Maximum operating current	2 A
Maximum switching capacity	62.5 VA, 60 W
Minimum permissible load	10 mVDC, 10 µA
COIL DATA	
Pickup voltage	75% max.
Dropout voltage	10% min.
Maximum voltage	200% at 23°C max.
CHARACTERISTIC DATA	
Intitial contact resistance	75 mΩ max.
Operate time	4 ms max. (actual value: approx. 2.5 ms)
Release time	4 ms max. (actual value: approx. 1.5 ms)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	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
Surge withstand voltage	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
Ambient temperature	-40° to 85°C
Service life	*Mechanical:* 100,000,000 operations min. (at operating frequency of 36,000 operations/hour) *Electrical:* 500,000 operations min. at 1A, 30 VDC
CONSTRUCTION DATA	
Termination	SMT gull-wing, SMT inside "L", PCB terminals
Construction	Fully-sealed
Weight	.07oz. (2g)
Packaging method	Tubes, tape & reel

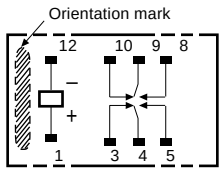
Cross Reference:

PART NUMBER

		FTA		
Omron	**Aromat**	**Fujistu**	**Takamisawa**	**NEC**
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

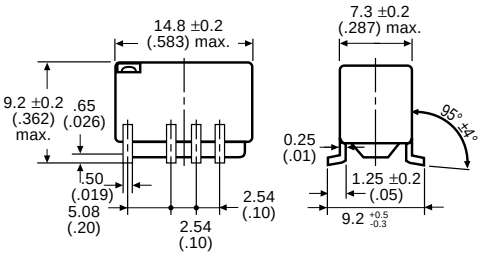
Dimensions:

Terminal Arrangement / Internal Connections

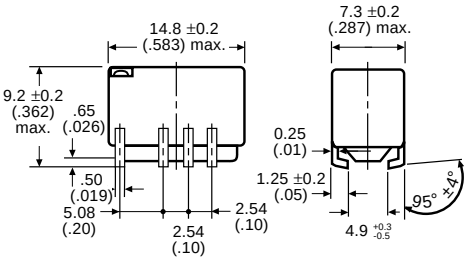


Top View

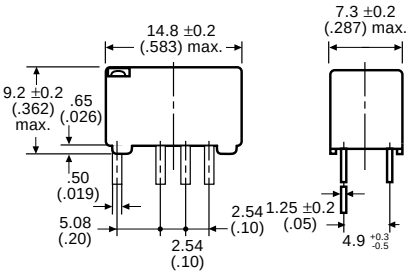
G6S-2F



G6S-2G



G6S-2



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