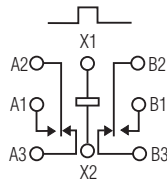


Double Pole, Electrically Held, 1 Amp and Less (Continued)

SMGA, SMGAD, SMGADD

SMGA
Standard .100 Grid Surface Mount High Performance Relay
Designed to MIL-R-39016/17

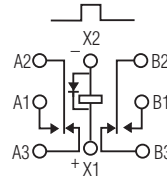


Terminal View

Product Facts

- Hermetically sealed
- High shock & vibration ratings
- Surface mount leads
- Excellent RF switching

SMGAD
Standard .100 Grid Diode Suppressed Surface Mount High Performance Relay
Designed to MIL-R-39016/18

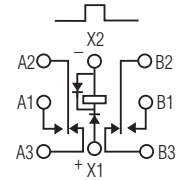


Terminal View

Product Facts

- Suppression diode
- Hermetically sealed
- High shock & vibration ratings
- Surface mount leads
- Excellent RF switching

SMGADD
Standard .100 Grid Diode Suppressed/Protected Surface Mount High Performance Relay
Designed to MIL-R-39016/19



Terminal View

Product Facts

- Suppression & protection diodes
- Hermetically sealed
- High shock & vibration ratings
- Surface mount leads
- Excellent RF switching

Electrical Characteristics

Contact Arrangement — 2 Form C (DPDT)

Contact Material — Stationary — Gold/platinum/palladium/silver (gold plated)
 Moveable — Gold/platinum/palladium/silver (gold plated)

Contact Resistance — Before Life — 100 milliohms max. (measured @ 10 mA @ 6 Vdc)
 After Life — 200 milliohms max. (measured @ 1 A @ 28 Vdc)

Mechanical Life Expectancy — 1 million operations

Coil Voltage — 5 to 26.5 Vdc

Coil Power — 660 mW max. @ 25°C

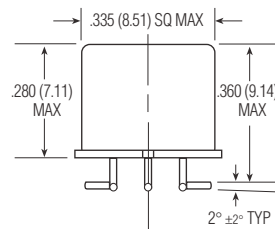
Duty Cycle — Continuous

Pick-up Voltage — Approximately 50% of nominal coil voltage

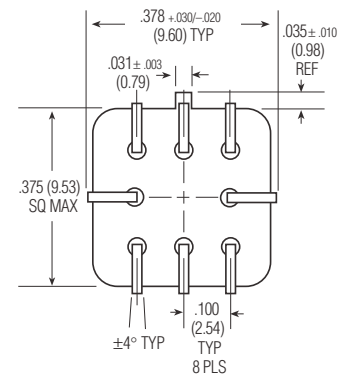
Pick-up Sensitivity — 130 mW max. @ 25°C

Contact Ratings

Contact Load	Type	Operations Min.
1.0 A @ 28 Vdc	Resistive	100,000
250 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive (case not grounded)	100,000
100 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.2 A @ 28 Vdc	Inductive (0.32 Henry)	100,000
0.1 A @ 28 Vdc	Lamp	100,000
30 µA @ 50 mVdc	Low Level	1,000,000
0.1 A @ 28 Vdc	Intermediate Current	50,000



Enclosure



Header

Double Pole, Electrically Held, 1 Amp and Less (Continued)

SMGA, SMGAD, SMGADD
(Continued)

Operating Characteristics

Timing —
Operate Time — 2.0 ms max.
Release Time —
SMGA — 1.5 ms max.
SMGAD/SMGADD — 4.0 ms max.
(suppression diode, protection/
suppression diodes)

Contact Bounce — 1.5 ms max.

Dielectric Withstanding Voltage —

Between Open Contacts —
500 Vrms 60 Hz
Between Adjacent Contacts —
500 Vrms 60 Hz
Between Contacts & Coil —
500 Vrms 60 Hz

Insulation Resistance —
10,000 megohms min. @ 500 Vdc
1,000 megohms @ 500 Vdc
(coil to case @ +125°C)

Environmental Characteristics

Temperature Range —
-65°C to +125°C

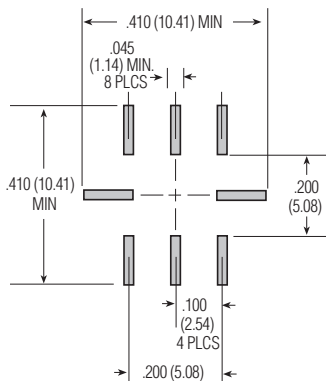
Weight —
0.09 oz. (2.55 gms)

Vibration Resistance —
30 G's, 10 to 3,000 Hz

Shock Resistance —
75 G's, 6 ±1 ms max.

Semiconductor Characteristics

Diode —
100 Vdc peak inverse voltage (PIV)
1.0 Vdc max. transient voltage



Recommended Solder Pad Layout

Coil Data

Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ±10% @ 25°C (Note)	Coil Circuit Current mA (Max.) (Note)	Coil Circuit Current mA (Min.) (Note)	Pickup Voltage Vdc (Max.) @ 25°C	Pickup Voltage Vdc (Max.) @ 125°C	Drop-Out Voltage Vdc (Min.) @ 25°C	Drop-Out Voltage Vdc (Min.) @ -65°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.
SMGA/SMGAD										
5.0	50	n/a	n/a	2.7	3.5	0.22	0.14	500	5.8	5
6.0	98	n/a	n/a	3.5	4.5	0.28	0.18	367	8.0	6
9.0	220	n/a	n/a	5.3	6.8	0.54	0.35	368	12.0	9
12.0	390	n/a	n/a	7.0	9.0	0.63	0.41	369	16.0	12
18.0	880	n/a	n/a	10.5	13.5	0.91	0.59	368	24.0	18
26.5	1,560	n/a	n/a	14.2	18.0	1.37	0.89	450	32.0	26
SMGADD										
5.0	39	128.2	93.2	3.2	4.0	0.6	0.6	641	5.8	5
6.0	78	78.3	58.3	4.0	5.0	0.7	0.7	462	8.0	6
9.0	220	42.9	33.0	6.3	7.8	0.9	0.8	368	12.0	9
12.0	390	32.8	25.6	8.0	10.0	1.1	0.9	369	16.0	12
18.0	880	22.1	17.5	11.5	14.5	1.4	1.1	368	24.0	18
26.5	1,560	18.5	14.8	15.2	19.0	1.8	1.4	450	32.0	26

Note: Coil resistance not directly measurable. Coil current should be within limits shown when tested at nominal voltage at 25°C for 5 seconds max.

Ordering Instructions

Catalog-selected Relays: The catalog number is derived by choosing the proper CODE for each of the relay characteristics in the order in which the codes are listed.

Specifying a Part Number Example:	Type	Diode	Coils
	SMGA	D	-26