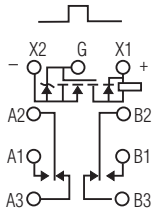
Double Pole, Electrically Held, 1 Amp and Less (Continued)

MGAT

MGAT

Standard .100 Grid Diode Suppressed/MOSFET Driven High Performance Relay

Qualified to MIL-R-28776/6



Terminal View

Product Facts

- **MOSFET driver, zener & suppression diodes**
- **Hermetically sealed**
- **High shock & vibration ratings**
- **Mounting pads**
- **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

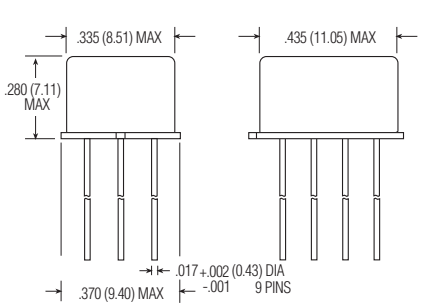
Pick-up Sensitivity — 130 mW max. @ 25°C

Contact Ratings

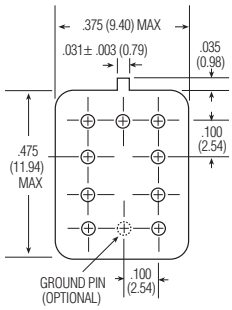
Contact Load	Type	Operations Min.
1.0 A @ 28 Vdc	Resistive	100,000
250 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive (case not grounded)	100,000
100 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.2 A @ 28 Vdc	Inductive (0.32 Henry)	100,000
0.1 A @ 28 Vdc	Lamp	100,000
30 µA @ 50 mVdc	Low Level	1,000,000
0.1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



MGAT



MGAT Enclosure



MGAT Header

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

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

MGAT (Continued)

Operating Characteristics

Timing —
Operate Time — 2.0 ms max.
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)
0.129 oz. (3.45 gms) w/ mounting pad attached

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

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

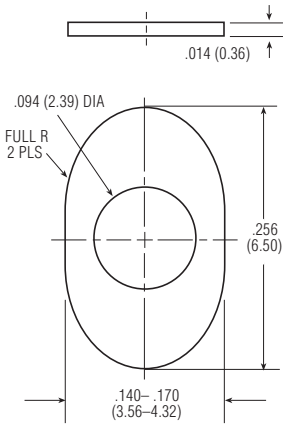
QPL Approval —
MIL-R-28776/6 (JMGAT)

Semiconductor Characteristics

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

Zener Diode —
20 Vdc ±3 Vdc over temperature range

MOSFET —
0.5 Vdc min. gate turn-off voltage
4.3 Vdc max. gate turn-on voltage



MGAT Mounting Pad

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.
MGAT										
5.0	39	132.3	96.5	2.9	3.5	0.23	0.13	641	5.8	5
6.0	78	83.9	60.3	3.5	4.5	0.32	0.18	462	8.0	6
9.0	220	47.1	33.1	5.3	6.8	0.48	0.27	368	12.0	9
12.0	390	36.1	24.9	7.1	9.0	0.65	0.36	369	16.0	12
18.0	880	24.1	16.1	10.6	13.5	0.97	0.54	368	24.0	18
26.5	1,560	19.9	12.9	14.2	18.0	1.30	0.72	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	Terminals	Diodes	Ground Pins	Coils	Mounting Pads
	MGA	C	T	G	-26	W

* The part number example shown on this page is for catalog items. For a list of specific QPL part numbers, please see the index in Section 15.

Catalog 5-1773450-5
Revised 3-13

www.te.com

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Dimensions are in millimeters unless otherwise specified.

USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TE Connectivity:

CPF0402B37K4E1 RH73H2A40MKTN 2380312-2 3430B2F51RTDF 2310537-1 SBCHE154R7K SMW73R0JT 1-794222-0 1903112-2 650075-000 MPT100C18RF ROX05SJ18R 1-962915-1 1393431-1 1743455-2 1969656-1 U5254-000005-030PA 141991-2 175977-2 2-292161-3 3-1393225-0 917696-1 TE50BR39J 2834055-1 2377783-2 3631B101LL CRGCQ2010J3K3 SBCHE64R7K 2005330-1 936348-1