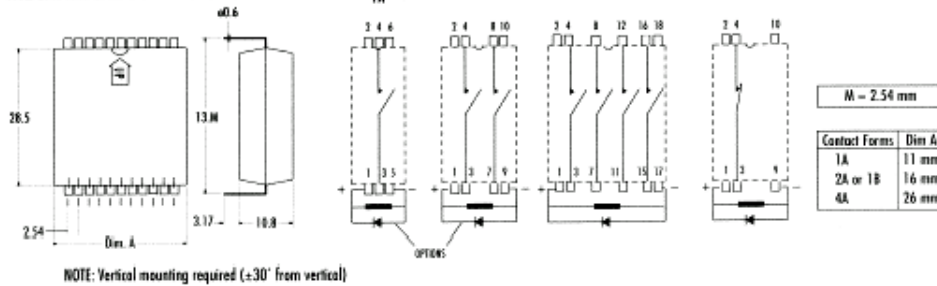


3582.745X RELAY SERIES

HG-Wetted relay



MECHANICAL DIMENSIONS



FEATURES

- Vertical mounting required
- High reliability bounce free switching
- Outgoing quality level <50 PPM
- Long operation life at low levels ($>1 \times 10^9$ operations)
- Stable contact resistance throughout life
- Switching voltage up to 1000V with reduced power
- 50W switching capability, up to 500 V
- Switching speed up to 200 Hz
- Automatic board processing
- Epoxy molded package

APPLICATIONS

- Automatic test equipment
- Process control
- Industrial
- Telecom
- Datacom
- High-end security systems
- Signaling
- Metering

HG Reed
Relays
Universal
package
Datasheet
MHMG

ORDERING INFORMATION

3582 745X XX X

1 = 1 form A
2 = 2 form A
4 = 4 form A
9 = 1 form B

Nominal coil Voltage
05 = 5V
12 = 12V
24 = 24V
48 = 48V

Version
1 = Standard
3 = Diode

COIL PARAMETERS

Type	Contact form	Coil Resistance ($\pm 10\%$)	Operate Voltage	Release Voltage	Nominal Voltage	Maximum Voltage	Nominal Input Power
3582 7451 05X	1 Form A	77 Ω	3.75V	0.5V	5V	12V	324 mW
3582 7451 12X	1 Form A	490 Ω	9V	1.3V	12V	31V	294 mW
3582 7451 24X	1 Form A	1870 Ω	18V	2.6V	24V	61V	308 mW
3582 7451 48X	1 Form A	7130 Ω	38V	5.3V	48V	120V	323 mW
3582 7452 05X	2 Form A	32 Ω	3.75V	0.4V	5V	9V	781 mW
3582 7452 12X	2 Form A	184 Ω	9V	0.9V	12V	23V	783 mW
3582 7452 24X	2 Form A	744 Ω	18V	2V	24V	47V	774 mW
3582 7452 48X	2 Form A	2850 Ω	38V	3.9V	48V	92V	808 mW
3582 7454 05X	4 Form A	20 Ω	3.75V	0.4V	5V	9V	1250 mW
3582 7454 12X	4 Form A	126 Ω	9V	1V	12V	23V	1143 mW
3582 7454 24X	4 Form A	510 Ω	18V	2.1V	24V	43V	1200 mW
3582 7454 48X	4 Form A	1920 Ω	38V	4.2V	48V	95V	1200 mW
3582 7459 05X	1 Form B	75 Ω	3.75V	0.5V	5V	6V	333 mW
3582 7459 12X	1 Form B	507 Ω	9V	1.3V	12V	15V	284 mW
3582 7459 24X	1 Form B	1850 Ω	18V	2V	24V	30V	311 mW
3582 7459 48X	1 Form B	7100 Ω	38V	3.9V	48V	60V	325 mW

RELAY PARAMETERS

Relay Specifications	Conditions	Symbol	Min	Typ	Max	Units
Insulation Resistance	Across open contact	IR	10^8	10^{11}		Ω
	Contact to contact	IR	10^{10}	10^{12}		Ω
	Contact to coil	IR	10^{10}	10^{12}		Ω
Capacitance	at 500V, 25°C, 10%RH			0.7		pF
	Across Open Contacts			2		pF
	Open contact to coil			3		pF
Dielectric Strength	Closed contact to Coil					VDC/Peak AC
	Between Contacts	I/O	2000			VAC
	Contact to Contact	I/O	1000			VAC
Operate Time	Contact to Coil	I/O	1000			VAC
	At V.nom 10Hz Sq. Wave 1 F. A	T_{op}		1.6		ms
	At V.nom 10Hz Sq. Wave 2 F. A	T_{op}		1.8		ms
	At V.nom 10Hz Sq. Wave 4 F. A	T_{op}		1.95		ms
	At V.nom 10Hz Sq. Wave 1 F. B	T_{op}		1.9		ms
	Zener-diode suppression 1 F. A	T_{rel}		1.6		ms
Release Time	Zener-diode suppression 2 F. A	T_{rel}		1.6		ms
	Zener-diode suppression 4 F. A	T_{rel}		1.75		ms
	Zener-diode suppression 1 F. B	T_{rel}		1.6		ms
	Conditions	Symbol	Min	Typ	Max	Units
Storage Temperature	T_a	-40		+105	°C	
Operating Temperature	T_o	-38		+75	°C	
Soldering Temperature				+260	°C	
Vibration Resistance (Survival)	10 Hz - 500 Hz	G		10	g	
Shock Resistance (Survival)	11 \pm 1 ms, 1/2 Sine Wave	S		30	g	
Weight: 1A 8.3g. 2A 12g. 4A 20g. 1B 12.5g						

SWITCHING PARAMETERS

Contact Ratings	Conditions	Symbol	Min	Typ	Max	Units
Switching Voltage	Max DC/Peak AC Resist	V_1			500	Volts
Switching Current	Max DC/Peak AC Resist	I_1			2	Amps
Carry Current (24 h)	Max DC/Peak AC Resist	I_c			3	Amps
Contact Rating	Max DC/Peak AC Resist				50	Watts
Life Expectancy	Signal Level 1.0V, 10mA Rated Loads		1000			$\times 10^6$ Ops
	50V, 1A		2			$\times 10^6$ Ops
	500V, 100mA		50			$\times 10^6$ Ops
Static Contact Resistance	50mV, 10mA	CR		40	100	m Ω
Contact Mat. Hg content				40		mg

NOTE: All parameters at 25°C unless otherwise stated