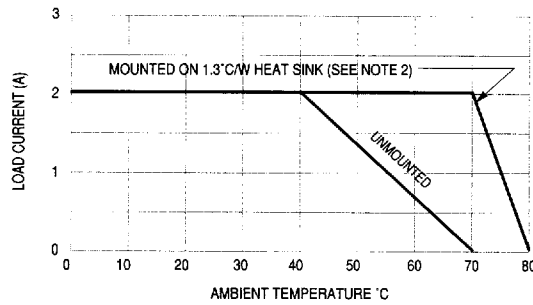
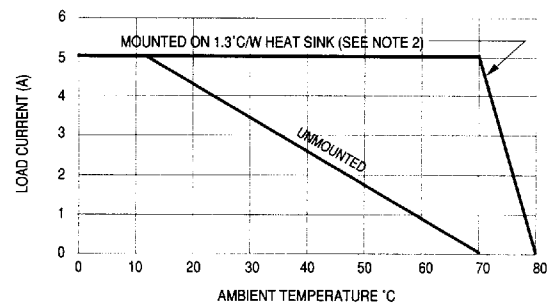
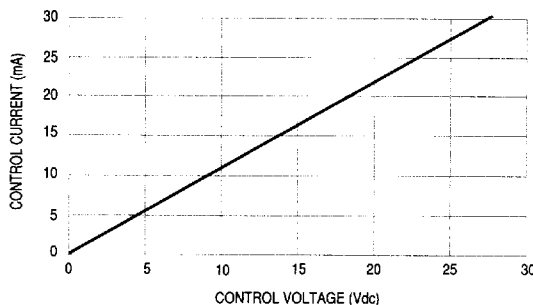
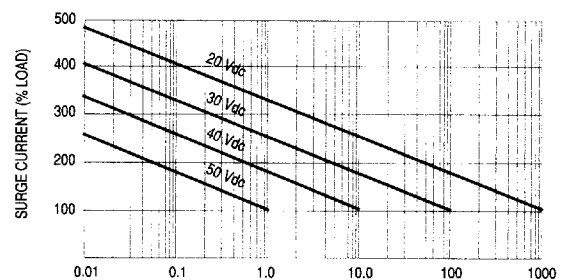
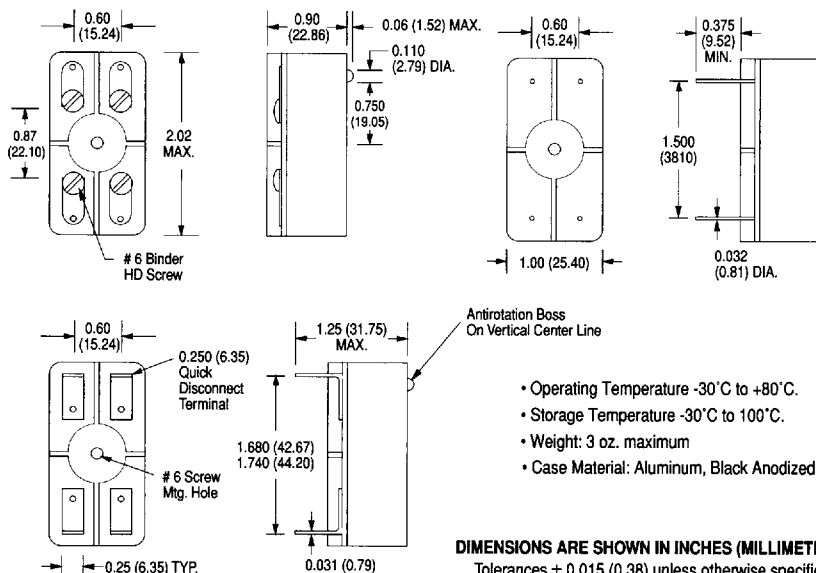


CHARACTERISTIC CURVES

LOAD CURRENT VS TEMPERATURE (603-1)
FIGURE 1LOAD CURRENT VS TEMPERATURE (603-2)
FIGURE 2INPUT CURRENT VS CONTROL VOLTAGE
FIGURE 3MAXIMUM SURGE AS FUNCTION OF LOAD VOLTAGE
FIGURE 4

MECHANICAL SPECIFICATIONS



- Operating Temperature -30°C to +80°C.
- Storage Temperature -30°C to 100°C.
- Weight: 3 oz. maximum
- Case Material: Aluminum, Black Anodized

DIMENSIONS ARE SHOWN IN INCHES (MILLIMETERS)
Tolerances ± 0.015 (0.38) unless otherwise specified

TIMING RESPONSE

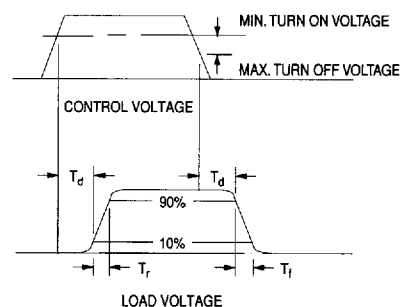
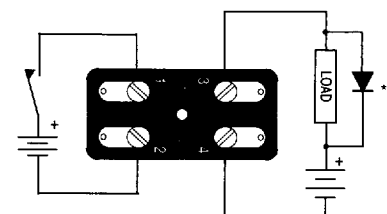


FIGURE 5

WIRING DIAGRAM



* Input and output polarity must be observed.
Inductive loads must be diode suppressed

NOTES:

1. The basic part number provides for screw terminals only. To order PC mounting pins add suffix "P" to part number. For quick disconnect terminals add suffix "Q" to part number.
2. Relays mounted on heat sink with silicon grease.
3. Rise and fall times of input signal must be less than 1 ms or damage to output stage may result.

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

DC Solid State Relay

TELEDYNE RELAYS

603 Series

OPTICALLY ISOLATED 2 AND 5 A/50 Vdc

Part* Numbers	Input Control Voltage Range	Output Voltage Rating	Output (Load) Current Rating
603-1	3 to 32 Vdc	50 Vdc	2A
603-2			5A

* See Note 1

ELECTRICAL SPECIFICATIONS

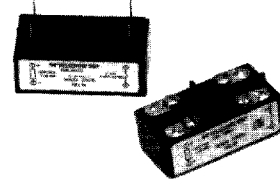
(25°C UNLESS OTHERWISE SPECIFIED)

INPUT (CONTROL) SPECIFICATIONS

Parameter	Min	Max	Units
Control Voltage Range (See Note 3) (-20°C to 80°C)	3	32	Vdc
Input Current at 32V (See Figure 3) (-20°C to 80°C)		36	mA
Must Turn-On Voltage	3		Vdc
Must Turn-Off Voltage (-30°C to +80°C)		0.8	Vdc
Reverse Voltage Protection		-32	Vdc

OUTPUT (LOAD) SPECIFICATIONS

Parameter	Part Number	Min	Max	Units
Load Voltage Rating		3	50	Vdc
Output Current Rating (See Figures 1 & 2)	603-1		2	Adc
	603-2		5	
On-State Voltage Drop			1.5	Vdc
Output Leakage Current (See Figure 5)	603-1		10	mA
	603-2		15	
Turn-On Time (See Figure 5)			100	μs
Turn-Off Time			300	μs
Isolation (Input to Output, Input to Case, Output to Case)		10 ⁹		Ohms
Dielectric Strength (Input to Output, Input to Case, Output to Case)		1500		Vac
Capacitance (Input to Output)			20	pF
Junction Temperature (T _J)			150	°C
Thermal Resistance (θ _{JA})			30	°C/W
Thermal Resistance (θ _{JC})			10	°C/W



FEATURES/BENEFITS

- Fast Switching Speed - Where speed is important
- Floating Output - Eliminates ground loops and signal level ground noise.
- Low Off-State Leakage Current - High off state impedance
- High Dielectric Strength - For safety and protection of signal level circuits.
- Broad Operating Temperature Range - -30°C to 80°C.

DESCRIPTION

These optically coupled solid state relays are rated at 2 Adc and 5 Adc at 50 Vdc, and are available with TTL compatible inputs. Packages are available in three different configurations with a choice of screw terminals, quick disconnect terminals or through hole solder pins. This allows for maximum flexibility for mounting onto printed circuit boards, panels, or heat sink mounting with optimal mechanical and thermal considerations.

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