

POTTER & BRUMFIELD RELAYS

DIP, 16 pin, IC-type I/O modules from P&B are space saving, cost effective interfaces.

IA16/OA16 SERIES

Potter & Brumfield 16 pin, dual in-line package (DIP) Input/output (I/O) modules provide a means of reliably interfacing between micro-processor or computer-based control systems and external input devices and loads.

These solid state I/O modules are offered in two photo-isolated versions: AC output (OA16) and AC/DC input (IA16). Input modules provide an output which is active low. Output modules can be controlled from active low or active high logic. The OA16 utilizes zero crossover switching to virtually eliminate transients and generated EMI noise.

P&B DIP I/O modules are ideal for use in such applications as programmable controllers, robotics, elevator controls, business machines, computer process controls, machine tool controls, energy management, automatic test equipment and telecommunications.

ENGINEERING DATA

Switch Form: 1 Form A (SPST-NO).

Duty: Continuous.

Isolation: 4,000V rms, 60 Hz. (Pins 1, 2 & 16 shorted; pins 7, 8, 9 & 10 shorted).

Transient Noise Immunity: Greater than 3,000V_{p-p} (NEMA ICS2-230).

Insulation Resistance: 10¹¹ ohms @ 500V DC, minimum.

Moisture Resistance: 10¹¹ ohms @ 500V DC, minimum, per MIL-STD-883C Method 1004.4.

Capacitance: 10 pF maximum (input to output).

Operating Temperature: -30°C to +85°C

Storage Temperature: -40°C to +100°C

Vibration: 100 g, 10 to 2,000 Hz.

Shock: 1,500 g @ 0.5 millisecond, per MIL-STD-883C Method 2002.3.

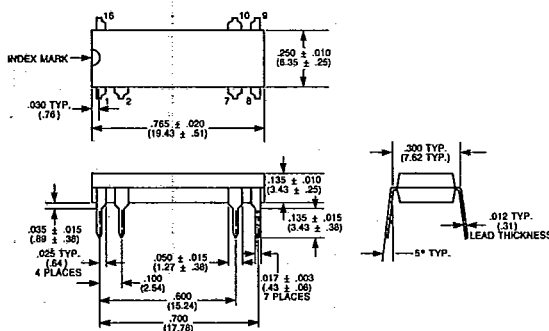
Case: 16 pin DIP style package with only 7 terminals.

Case Material: Self extinguishing, filled epoxy, 94V1

Solderability: 260°C for 10 seconds, maximum.

Approximate Weight: 0.08 oz. (2.3 grams).

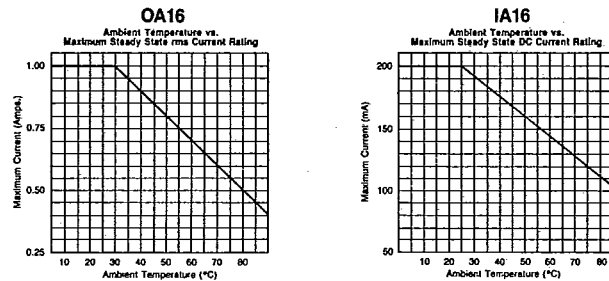
OUTLINE DIMENSIONS



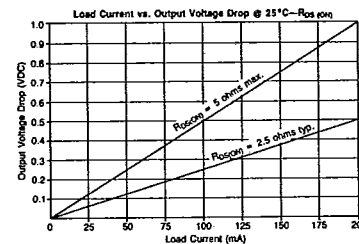
FEATURES

- Hybrid Thick Film Design
- Auto Insertable DIP Package
- TTL Compatible
- High Degree of Isolation and Immunity to False Operation
- Output Modules Rated to 1A Switching
- Input Modules Accept AC or DC Input Voltage
- Meets VDE Spacing and Voltage Requirements
- Optical Isolation
- UL File 29244
- IA16-Industrial Control Equipment
- OA16-Industrial Control Equipment, Intrinsically Safe Equipment and Systems for use in Hazardous Locations
- CSA File LR15734 (IA16 & OA16)
- TUV File E77060 (OA16) to DIN VDE 0883/6.80

ELECTRICAL CHARACTERISTICS

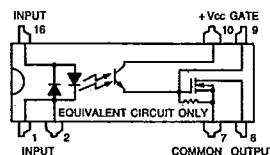


IA16

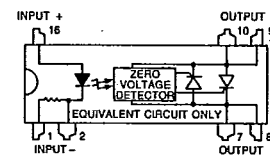


OPERATING DIAGRAMS

IA16 Input Modules



OA16 Output Modules



DIP I/O MODULE ORDERING INFORMATION

Part Number	Input					Output @ 25° C						Module Function
	Type	Current		Voltage		Type	Current		Voltage			
		Min. mA	Max. mA	Min. V	Max. V		Min. mA	Max. A	Min. V	Max.		
										V	V _{peak}	
*IA16-11	AC or DC	5	30	—	—	DC	>0	0.2	>0	30	—	AC/DC Input
*IA16-12	AC or DC	2	30	—	—	DC	>0	0.2	>0	30	—	AC/DC Input
*OA16-55	DC	10	30	3.5	8	AC	5	1	12	280	500	AC Output
*OA16-65	DC	10	30	3.5	8	AC	5	1	12	280	600	AC Output
*OA16-66	DC	5	30	3.5	8	AC	5	1	12	280	600	AC Output

• Denotes UL
* Denotes CSA