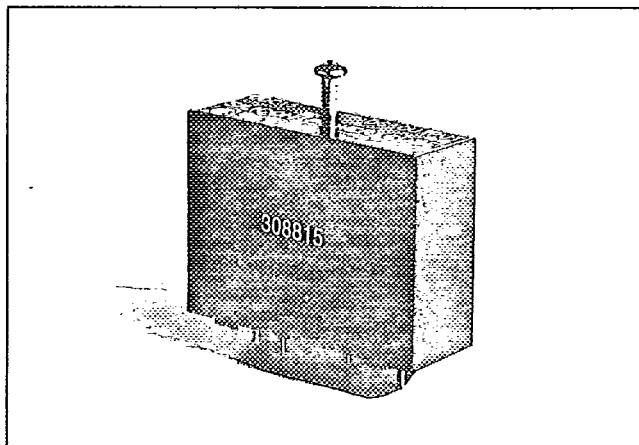



**SILICON
POWER
CUBE**
**SOLID STATE
OPTO-ISOLATED I/O MODULES**

T-41-89


IAC/IDC/OAC/ODC SERIES

Industrial environments can subject sensitive microelectronic circuits to undesirable stresses in the form of voltage transients, electrical noise, shock, vibration, etc. These can result in permanent damage, spurious operations or false indications. SPC'S I/O modules are designed to provide an electrically clean, photo-isolated, noise-free "output" interface from logic level control systems to external loads such as motors, valves, solenoids, etc., or, an "input" interface from the load or sensors to microprocessor or computer-based logic level systems. Used with SPC'S I/O mounting boards, these solid-state modules exhibit long, reliable life in industrial environments.

FEATURES

- Color-coded by Function
- 4000 Vrms Optical Isolation
- Industry Standard Package and Pin-out
- High Transient Noise Immunity
- Series Operation Compatibility
- UL Recognized, CSA Certified, SEV Approved Types Available

GENERAL SPECIFICATIONS	SYSTEM VOLTAGE 5VDC								
	MODEL NUMBER								
	IAC5	IAC5A	IDC5	IDC5B	IDC5D	OAC5	OAC5A	ODC5	ODC5A
Voltage, Type	AC or DC Input	AC or DC Input	DC Input	DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	Yellow	White	White	White	Black	Black	Red	Red
INPUT SPECIFICATIONS									
Voltage Range	90-140 VAC	180-280 VAC	10-36 VDC	4-16 VDC	3-32 VDC	3-6 VDC	3-6 VDC	3-6 VDC	3-6 VDC
Typical Current @ Rated Volt. (mA)	6	4	4	4	8	4	4	3	3
Typical Current @ Max. Volt. (mA)	10	7	13	20	12	20	20	14	14
OUTPUT SPECIFICATIONS									
Load Current Over Load Voltage Range	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.02-3A @ 12-280 VDC	.02-3A @ 24-280 VDC	.02-3A @ 5-60 VDC	.02-1A @ 10-200 VDC
Max. Turn-on/Turn-off Time (mS)	20/20	20/20	5/5	.05/1	1/1.5	Half/Half (cycle)	Half/Half (cycle)	0.5/0.5	0.5/0.5
Switching Type	Random	Random	Random	Random	Random	Zero	Zero	Random	Random
Notes	1, 2, 3, 5, 7	1, 2, 3, 5, 7	1, 2, 5	1, 2, 5	1, 2, 5	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4

GENERAL SPECIFICATIONS	SYSTEM VOLTAGE 15 VDC						
	MODEL NUMBER						
	IAC15	IAC15A	IDC15	OAC15	OAC15A	ODC15	ODC15A
Voltage Type	AC or DC Input	AC or DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	Yellow	White	Black	Black	Red	Red
INPUT SPECIFICATIONS							
Voltage Range	90-140 VAC	180-280 VAC	10-36 VDC	9-18 VDC	9-18 VDC	9-18 VDC	9-18 VDC
Max. Input Current @ Rated Volt. (mA)							
Max. Input Current @ Max. Volt. (mA)							
OUTPUT SPECIFICATIONS							
Load Current Over Load Voltage Range	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.02-3A @ 12-280 VAC	.02-3A @ 24-280 VAC	.02-3A @ 5-60 VDC	.02-1A @ 10-200 VDC
Max. Turn-on/Turn-off Time (mS)	20/20	20/20	5/5	Half/Half (cycle)	Half/Half (cycle)	0.5/0.5	0.5/0.5
Switching Type	Random	Random	Random	Zero	Zero	Random	Random
Notes:	1, 2, 3, 5, 7	1, 2, 3, 5, 7	1, 2, 5	1, 2, 3, 4	1, 2, 3, 4	1, 2, 4	1, 2, 4

IAC/IDC/OAC/ODA SERIES, CONT.

GENERAL SPECIFICATIONS	SYSTEM VOLTAGE 24 VDC					
	MODEL NUMBER					
	IAC24	IDC24	OAC24	OAC24A	ODC24	ODC24A
Voltage, Type	AC or DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	White	Black	Black	Red	Red
INPUT SPECIFICATIONS						
Voltage Range	90-140 VAC	10-36 VDC	18-28 VDC	18-28 VDC	18-28 VDC	18-28 VDC
Max. Input Current @ Rated Volt. (mA)	8	4	10	10	7	7
Max. Input Current @ Max. Volt. (mA)	10	13	17	17	12	12
OUTPUT SPECIFICATIONS						
Load Current Over Load Voltage Range	.1-100mA @ .4-30 VDC	.1-100mA @ .4-30 VDC	.02-3A @ 12-280 VAC	.02-3A @ 24-280 VAC	.02-3A @ 5-60 VDC	.02-1A @ 10-200 VDC
Max. Turn-on/Turn-off Time (ms)	20/20	5/5	Half/Half (cycle)	Half/Half (cycle)	0.5/0.5	0.5/0.5
Switching Type	Random	Random	Zero	Zero	Random	Random
Notes	1, 2, 3, 5, 7	1, 2, 5, 7	1, 2, 3	1, 2, 3, 4	1, 2, 4	1, 2, 4

NOTES: 1. UL recognized.

2. CSA certified.

3. SEV approved.

4. The output of the AC output module is compatible with the input of the AC input module and the output of the DC output module is compatible with the input of the DC input module.

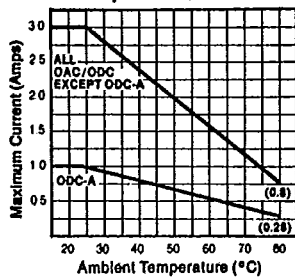
5. Input modules provide an output that is active low.

6. Output modules can be controlled from active low or active high logic.

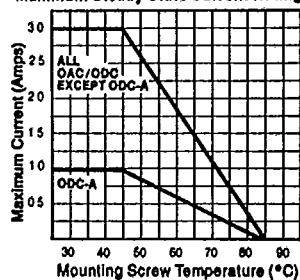
7. Input will operate on AC or DC voltage.

TEMPERATURE CHARACTERISTICS

OAC/ODC
Ambient Temperature vs
Maximum Steady State rms Current Rating

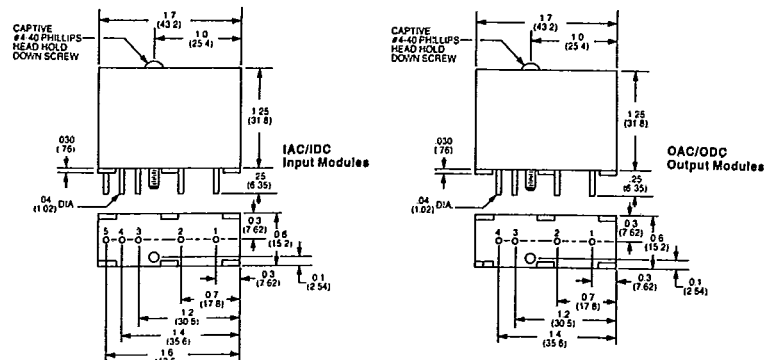


OAC/ODC
Module Mounting Temperature vs
Maximum Steady State Current Rating



Storage Temp.: -40°C to +85°C
Operating Temp.: -30°C to +80°C

OUTLINE/MOUNTING DIMENSIONS



CONNECTION DIAGRAMS

