

INTERNATIONAL RECTIFIER



CRYDOM

[查询"B3020R5A"供应商](#)

## SERIES B30

### PC Board Mount Solid State Relay

### 0.5 Amp, 200VDC DC Output

## CRYDOM B30

The Crydom B30 series is a low cost, high voltage solid state relay that combines reliability and small size in a package designed for solder connection into printed circuit boards. The low 0.7-inch profile allows minimum spacing of rack mounted boards. With a total volume of less than 0.8 cubic inches, the Model B3020R5A achieves a 0.5 ampere rating at 50°C at up to 200Vdc.

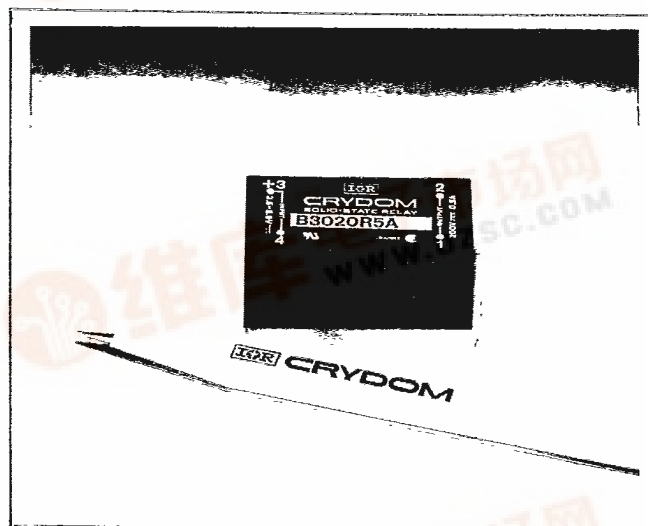
The B30 features internal suppression (see Note 1) fast response, photo isolation, input and output reverse voltage protection, and direct control by digital logic circuits. Applications include replacement of discrete components and solid state switches for control of solenoids, valves, motors and lamps.

### Electrical Specifications (-30°C ≤ TA ≤ 80°C)

Input Characteristics		Units	
Control Voltage Range	3-12	Vdc	
Max. Reverse Voltage	8.0	Vdc	
Max. Turn-On Voltage	3.0	Vdc	
Min. Turn-Off Voltage	1.0	Vdc	
Min. Input Impedance	1000	Ohms	
Max. Input Current	5VDC	5.0	mA
	12VDC	12	

### AC Output Characteristics

Operating Voltage Range (Continuous)	10-200	Vdc
Max. Load Current (See Derating Curve, Figure 1)	0.5	A
Min. Load Current	25	mA
Max. Surge Current (Non-repetitive) 50 ms (See Surge Curve, Figure 2)	3.0	A
Max. On-State Voltage Drop at Rated Current	1.5	Vdc
Max. Off-State Leakage Current at Rated Voltage	5.0	mA
Turn-On Time	0.5	msec
Turn-Off Time	1.0	msec



### General Characteristics

General Characteristics		Units	
Dielectric Strength 50/60Hz Input/Output	1500	VRMS	
Insulation Resistance @ 500Vdc Input/Output	10 <sup>10</sup>	Ohms	
Max. Capacitance Input/Output	10	pF	
Ambient Temperature Range	Operating	-30 to 85	°C
	Storage	-30 to 125	

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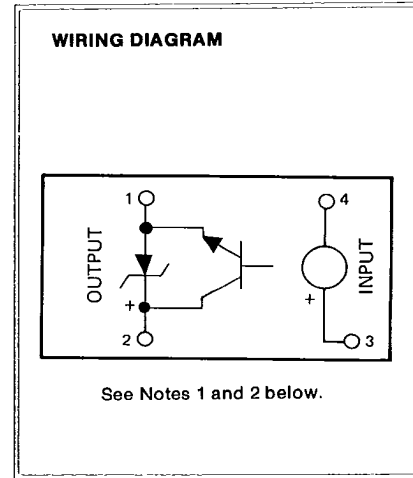
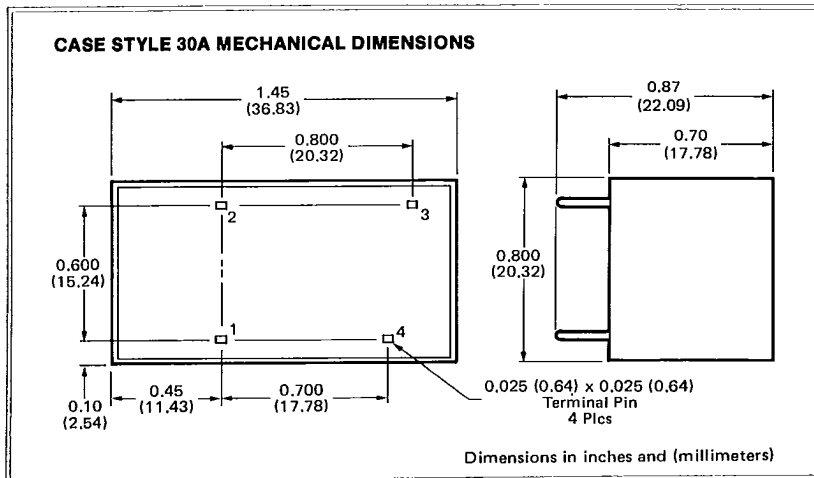
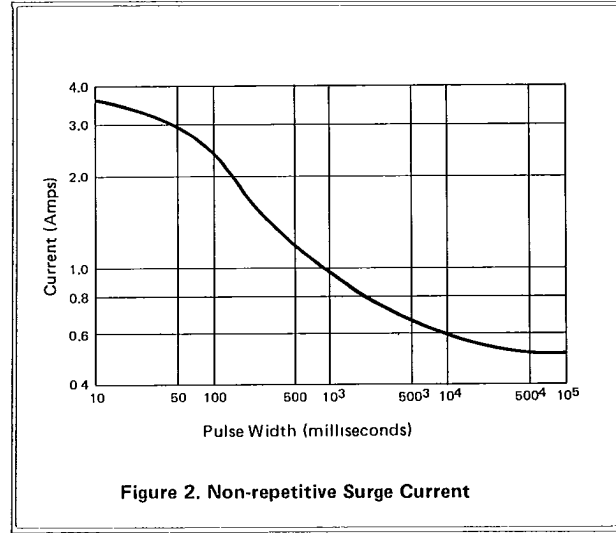
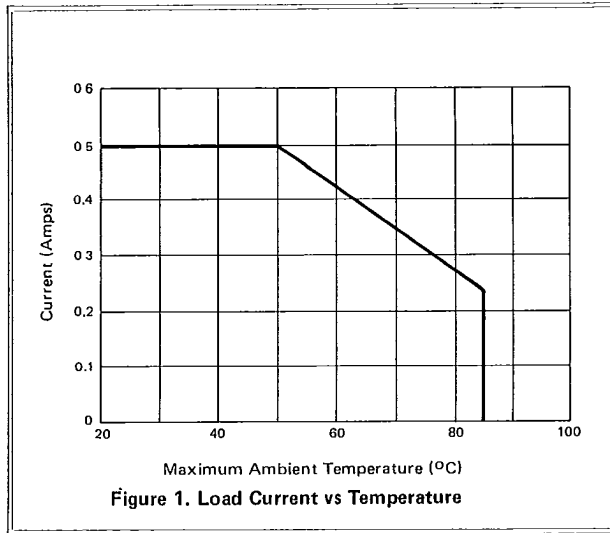
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# CRYDOM B30 SOLID STATE RELAY

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## PERFORMANCE CHARACTERISTICS CURVES



- NOTES:**
1. Inductive load can contribute substantial heating to the relay if not diode suppressed. Internal zener can withstand 2A peak pulse current @ 300V, capacitive discharge delay to 50% in 1 msec. Peak power 1 kW.
  2. Relay output is totally isolated. The load may be placed in either the positive or negative legs.

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