PVO402P NOT recommended for new designs

International **ISR** Rectifier

Electrical Specifications (-40°C \leq T_A \leq +85°C unless otherwise specified) **RELAY**

INPUT CHARACTERISTICS	Limits	Units
Minimum Control Current (see figure 1)	3.0	mA
Maximum Control Current for Off-State Resistance @T _A =+25°C	0.4	mA
Control Current Range (Caution: current limit input LED, see figure 6)	3.0 to 25	mA
Maximum Reverse Voltage	6.0	V
OUTPUT CHARACTERISTICS	Limits	Units
Operating Voltage Range	0 to ±400	V(DC or AC peak)
Maximum Load Current @ T _A =+40°C	120	mA
5mA Control (see figure 1)		
Maximum On-State Resistance @T _A =+25°C	35	Ω
For 50mA pulsed load, 5mA Control (see figure 4)		
Maximum Off-State Leakage @T _A =+25°C, ±400V (see figure 5)	1.0	μA
Maximum Turn-On Time @T _A =+25°C (see figure 7)	2.0	ms
For 50mA, 100 V _{DC} Load, 5mA Control		
Maximum Turn-Off Time @T _A =+25°C (see figure 7)	0.5	ms
For 50mA, 100 V _{DC} Load, 5mA Control		
Maximum Output Capacitance @ 50V _{DC}	12	pF
DETECTOR		
INPUT CHARACTERISTICS	Limits	Units
Minimum Control Current @ I _C = 2mA, V _{CE} = 0.5V	6.0	mA
Maximum Control Current for Off-State Leakage $I_C=1\mu A$, $V_{CE}=5V @T_A=+25^{\circ}C$	5	μA
Control Current Range (Caution: current limit input LED, see figure 6)	6.0 to 25	mA

	0.0 10 20	
OUTPUT CHARACTERISTICS	Limits	Units
Minimum Collector-Emitter Breakdown Voltage @ I _C = 10µA	20	V _{DC}
Minimum Current Transfer Ratio @ I_{LED} = 6mA, V_{CE} = 5V (see figure 9)	33	%
Maximum Saturation Voltage @ ILED = 16mA, IC = 2mA	0.5	V
Maximum Leakage Current @ ILED=0mA, VCE = 5V	500	nA
Maximum Power Dissipation @T _A =+25°C (derate linearly 2.0mW/°C)	150	mW

COMBINED

GENERAL CHARACTERISTICS		Limits	Units
Minimum Dielectric Strength, Input-Output		3750	V _{RMS}
Minimum Dielectric Strength, Relay-Detector		1000	V _{DC}
Minimum Insulation Resistance, Input-Output @T _A =+25°C, 50%RH, 100V _{DC}		1012	Ω
Maximum Capacitance, Input-Output		3.0	pF
Maximum Pin Soldering Temperature (10 seconds maximum)		+260	
Ambient Temperature Range:	Operating	-40 to +85	°C
	Storage	-40 to +100	

International Rectifier does not recommend the use of this product in aerospace, avionics, military or life support applications. Users of this International Rectifier product in such applications assume all risks of such use and indemnify International Rectifier against all damages resulting from such use.

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Connection Diagram





Figure 1. Current Derating Curve



Figure 2. Typical Output Capacitance

125





Figure 5. Typical Normalized Off-State Leakage



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Figure 8. Delay Time Definitions



Figure 9.Typical Transfer Characteristics

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Case Outline 9.52 (.375) 9.02 (.355) NOTES: -A-1. CONTROLLING DIMENSION: INCH. 3 Ħ F Ħ 2. DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES). H 3 DIMENSION DOES NOT INCLUDE MOLD PROTUSIONS. MOLD 6.60 (.260) 6.10 (.240) 8 6 7 5 PROTUSIONS SHALL NOT EXCEED 0.25 (.010). -B-2 3 H E Þ 0.53 (.021) 0.39 (.015) 9.52 (.375) 8X 9.28 (.365) ⊕0.25 (.010) MCBSAS 2.08 (.0 0.20 (.008) 0.51 (.002) 0.25 (.010) 1.94 (.0 8Х 0.21 (.008) 0^{°-}6[°] -C-8X 1.01 (.040) 8X 2.54 (.100) 0.51 (.020) 6X 1.27 (.050) 01-2011 00

ICR Rectifier IR WORLD HEADQUARTERS: 233 Kansas St., El Segundo, California 90245 Tel: (310) 252-7105 Data and specifications subject to change without notice. 1/24/2007

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