

Electrical Specifications ($-40^{\circ}\text{C} \leq T_A \leq +85^{\circ}\text{C}$ unless otherwise specified)

INPUT CHARACTERISTICS	PVA3054N	PVA3055N	Units
Minimum Control Current (see figure 1) For 55mA Continuous Load Current For 50mA Continuous Load Current For 35mA Continuous Load Current	2 5 5		DC mA@25°C mA@40°C mA@85°C
Maximum Control Current for Off-State Resistance at 25°C	10		μA(DC)
Control Current Range (Caution: current limit input LED. See figure 6)	2.0 to 25		mA(DC)
Maximum Reverse Voltage	6.0		V(DC)

OUTPUT CHARACTERISTICS	PVA3054N	PVA3055N	Units
Operating Voltage Range	0 to ± 300		V(PEAK)
Maximum Load Current 40°C I LED 5mA	50		mA(DC)
Response Time @25°C (see figures 6 and 7) Maximum T(on) @ 12mA Control, 20 mA Load, 100 VDC Maximum T(off) @ 12mA Control, 20 mA Load, 100 VDC	60 100		μs μs
Max. On-state Resistance 25°C (Pulsed) (fig. 3) 10 mA Load, 5mA Control	160		Ω
Minimum Off-state Resistance 25°C @ 240 VDC	10 ¹⁰	10 ¹¹	Ω
Maximum Off-state Leakage 25°C @ 5.0 VDC (see figure 4)	—	0.05	nA
Maximum Thermal Offset Voltage @ 5.0mA Control V _{O(OS)}	0.2		μvolts
Minimum Off-State dv/dt	1000		V/μs
Typical Output Capacitance (see figure 8)	2.2		pF @ 40V

GENERAL CHARACTERISTICS (PVA3054N and PVA3055N)		Units
Dielectric Strength: Input-Output	4000	V _{RMS}
Insulation Resistance: Input-Output @ 90Vdc	10 ¹² @ 25°C - 50% RH	Ω
Maximum Capacitance: Input-Output	1.0	pF
Max. Pin Soldering Temperature (1.6mm below seating plane, 10 seconds max.)	+260	°C
Ambient Temperature Range: Operating	-40 to +85	
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.

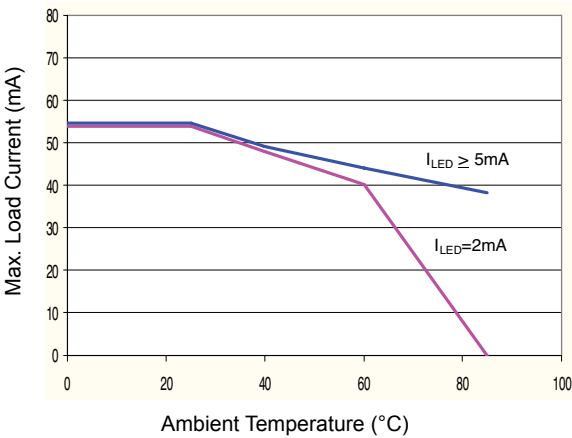


Figure 1. Current Derating Curves

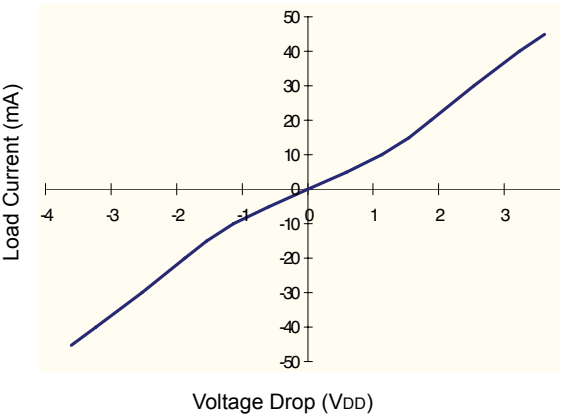


Figure 2. Typical On Characteristics

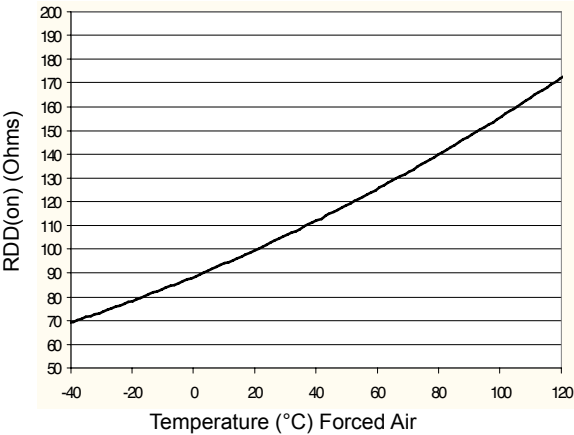


Figure 3. Typical On-Resistance

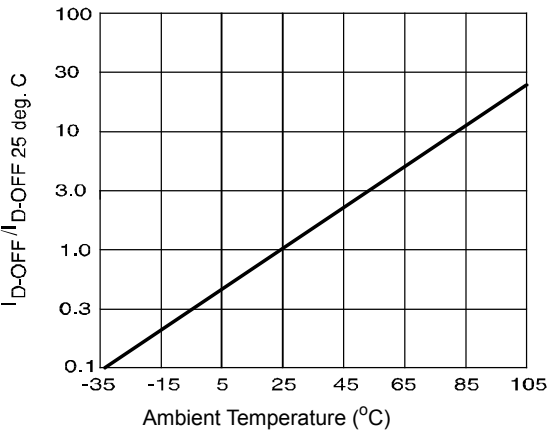


Figure 4. Typical Normalized Off-State Leakage

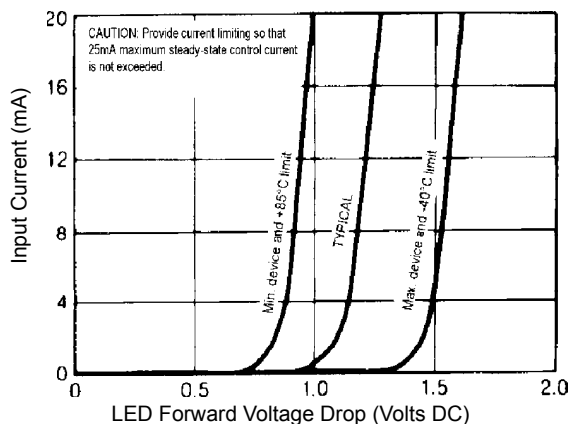


Figure 5. Input Characteristics
(Current Controlled)

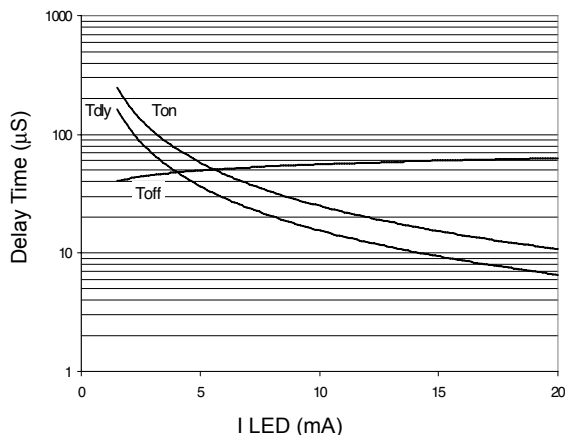


Figure 6. Typical Delay Times

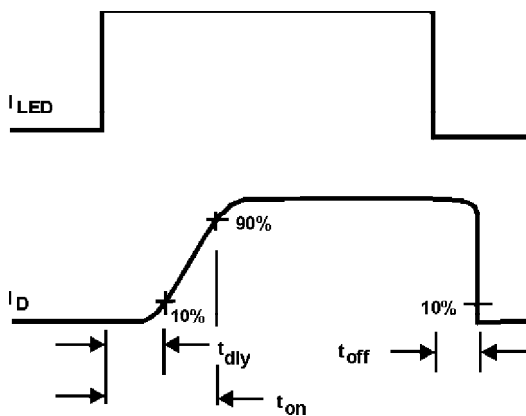


Figure 7. Delay Time Definitions

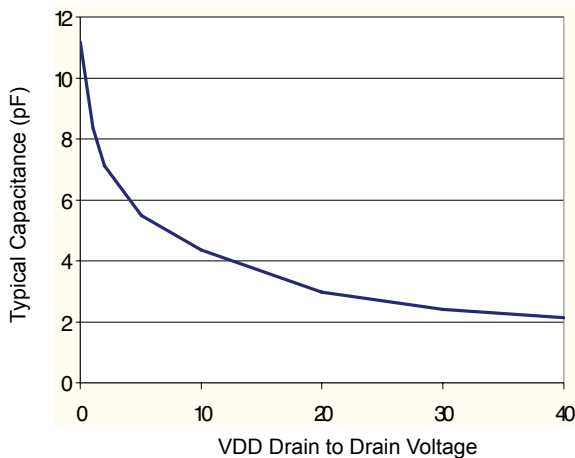
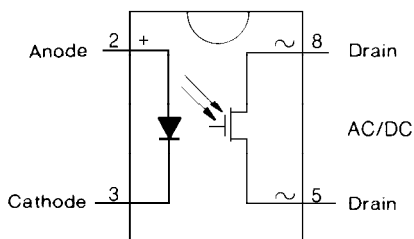
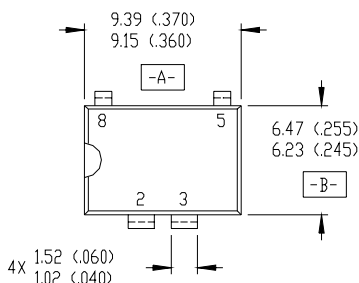


Figure 8. Typical Output Capacitance

Wiring Diagram



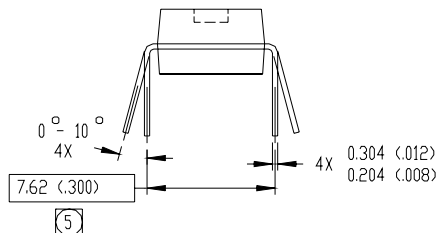
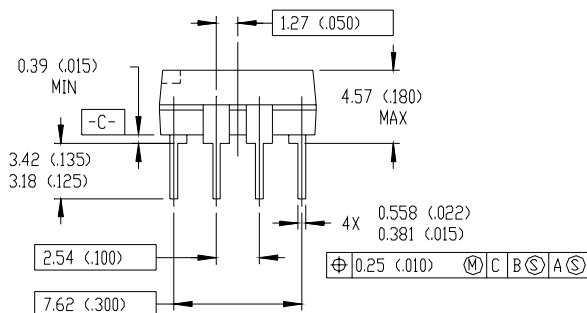
Case Outlines



NOTES:

1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
4. OUTLINE CONFORMS TO JEDEC OUTLINE MS-001AB.

⑤ MEASURED WITH THE LEADS CONSTRAINED TO BE PERPENDICULAR TO DATUM PLANE C.



01-2013 00 (MS-001AB)

