

## **Electrical Specifications** (-40°C $\leq$ T<sub>A</sub> $\leq$ +85°C unless otherwise specified)

INPUT CHARACTERISTICS	PVA1352N PVA1354N	Units
Minimum Control Current (see figures 1 and 2)		DC
For 325mA Continuous Load Current	2	mA@25°C
For 370mA Continuous Load Current	5	mA@40°C
For 190mA Continuous Load Current	5	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	PVA1352N	PVA1354N	Units
Operating Voltage Range	0 to ± 100		V <sub>(peak)</sub>
Maxiumum Load Current 40°C, I LED 5mA	375		mA(DC)
Response Time @25°C (see figures 7 and 8)			(20)
Maximum T <sub>(on)</sub> @ 12mA Control, 50 mA Load, 50 VDC	ontrol, 50 mA Load, 50 VDC		μs
Maximum T <sub>(Off)</sub> @ 12mA Control, 50 mA Load, 50 VDC	1:	25	μs
Maximum On-state Resistance 25°C (Pulsed) (figure 4) 50 mA Load, 5mA Control	5		Ω
Minimum Off-state Resistance 25°C @ 80 VDC (see figure 5)	108	10 <sup>10</sup>	Ω
Maximum Thermal Offset Voltage @ 5.0mA Control	0.2		μvolts
Minimum Off-State dv/dt	1000		V/µs
Typical Output Capacitance (see figure 9)	11pF @ 50VDC		

GENERAL CHARACTERISTICS (PVA1352N and PVA1354N)			Units
Dielectric Strength: Input-Output		4000	$V_{RMS}$
Insulation Resistance: Input-Output @ 90V <sub>DC</sub>		10 <sup>12</sup> @ 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	
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.



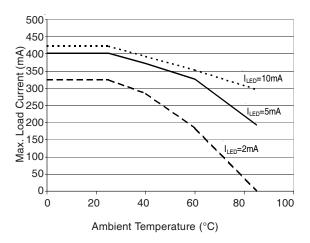


Figure 1. Current Derating Curves

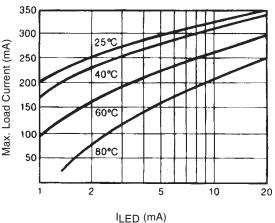


Figure 2. Typical Control Current Requirements

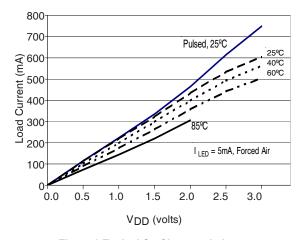


Figure 3. Typical On Characteristics

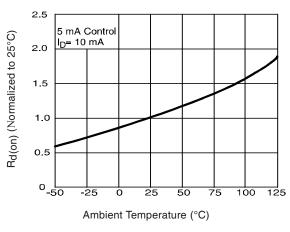


Figure 4. Typical Normalized On-Resistance



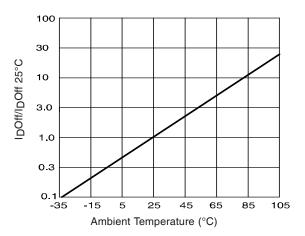


Figure 5. Normalized Off-State Leakage

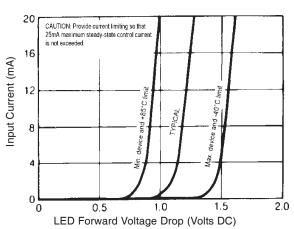


Figure 6. Input Characteristics (Current Controlled)

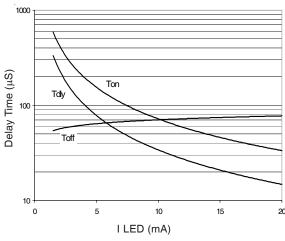


Figure 7. Typical Delay Times

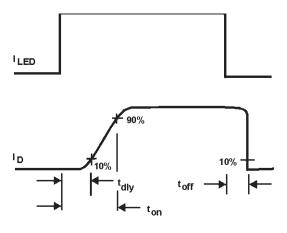
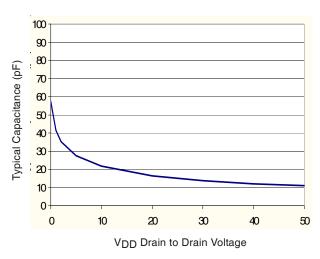


Figure 8. Delay Time Definitions





Wiring Diagram

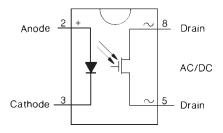
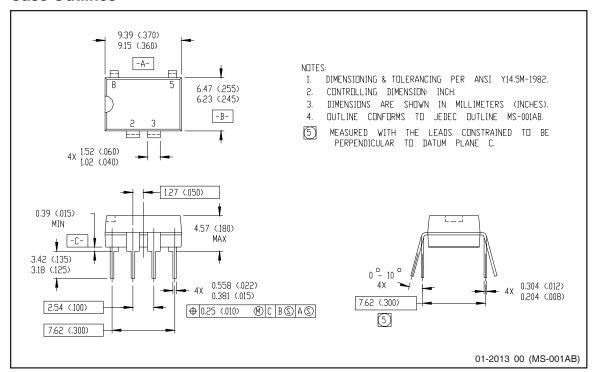


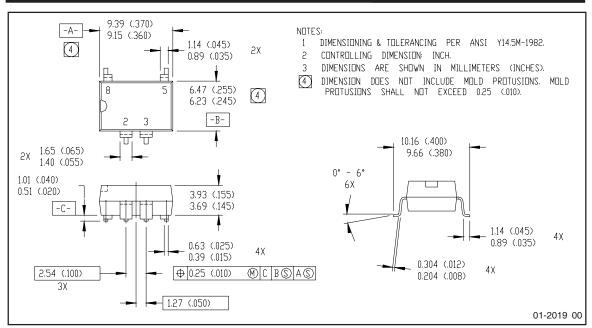
Figure 9. Typical Output Capacitance

## **Case Outlines**



Note: For the most current drawing please refer to IR website at: http://www.irf.com/package/





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## Qualification information<sup>†</sup>

Qualification level	Industrial (per JEDEC JESD47I <sup>††</sup> guidelines)	
Moisture Sensitivity Level	PVA1352NPbF	N/A
	PVA1354NPbF	IVA
	PVA1352NSPbF	MSL4
	PVA1354NSPbF	( IEDEO   OTD 000E % IEDEO   OTD 0000
	PVA1354NS-TPbF	(per JEDEC J-STD-020E & JEDEC J-STD-033C
RoHS compliant	Yes	

- † Qualification standards can be found at International Rectifier's web site: http://www.irf.com/product-info/reliability
- †† Applicable version of JEDEC standard at the time of product release

## **Revision History**

Date	Comments
1 4/24/2015	Added Qualification Information Table on page 6
	Updated data sheet with new IR corporate template



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