

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

| INPUT CHARACTERISTICS | PVD1352N | PVD1354N | Units |
|--|-----------|----------|---------|
| Minimum Control Current (see figures 1 and 2) | | | DC |
| For 500mA Continuous Load Current | 2 | | mA@25°C |
| For 550mA Continuous Load Current | 5 | | mA@40°C |
| For 350mA 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 | PVD1352N | PVD1354N | Units |
|--|-----------------|------------------|---------------------|
| Operating Voltage Range | 0 to + 100 | | V _(PEAK) |
| Maximum Load Current 40°C I LED 5mA | 550 | | mA(DC) |
| Response Time @25°C (see figures 7 and 8) | | | |
| Max. T _(on) @ 12mA Control, 50 mA Load, 100 VDC | 150 | | μs |
| Max. T _(off) @ 12mA Control, 50 mA Load, 100 VDC | 125 | | μs |
| Max. On-state Resistance 25°C (Pulsed) (fig. 4) 200 mA Load, 5mA Control | 1.5 | | Ω |
| Min. Off-state Resistance 25°C @ 80 VDC (see figure 5) | 10 ⁸ | 10 ¹⁰ | Ω |
| Max. Thermal Offset Voltage @ 5.0mA Control | 0.2 | | μvolts |
| Min. Off-State dv/dt | 1000 | | V/μs |
| Typical Output Capacitance | 20 | | pF @ 50VDC |

| GENERAL CHARACTERISTICS | (PVD1352N and PVD1354N) | Units |
|---|----------------------------------|------------------|
| Dielectric Strength: Input-Output | 4000 | V _{RMS} |
| Insulation Resistance: Input-Output @ 90V _{DC} | 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.

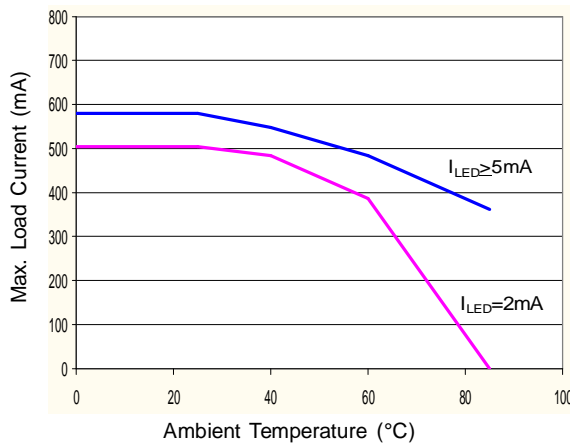


Figure 1. Current Derating Curves

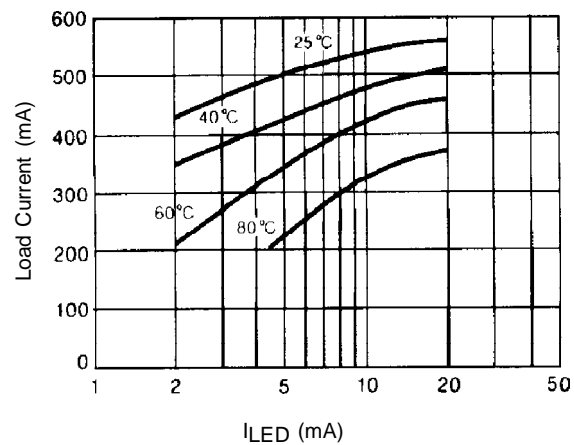


Figure 2. Typical Control Current Requirements

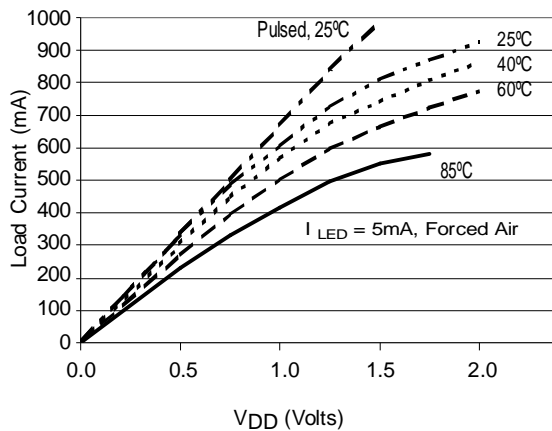


Figure 3. Typical On Characteristics

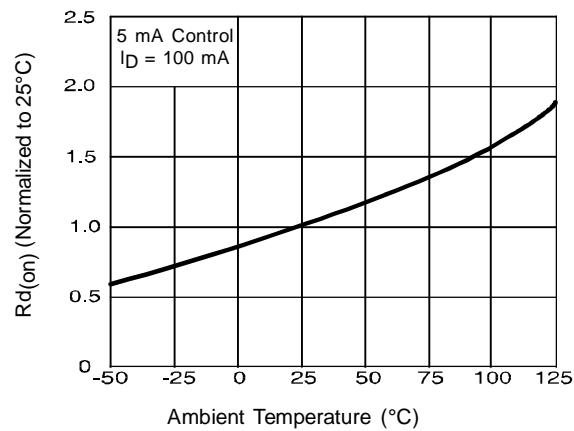


Figure 4. Typical Normalized On-Resistance

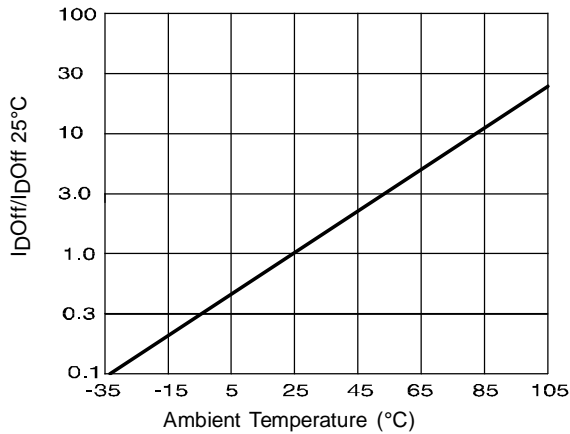
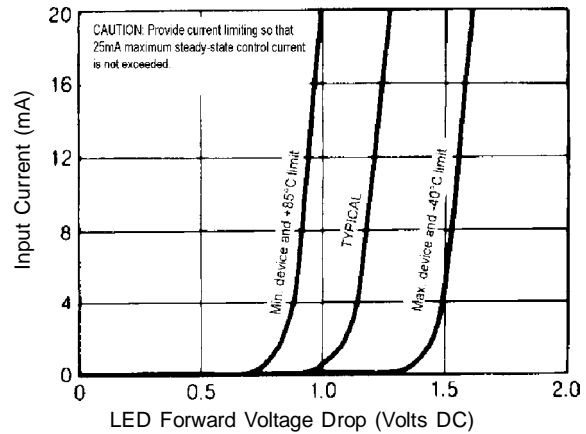


Figure 5. Typical Normalized Off-State Leakage



**Figure 6. Input Characteristics
(Current Controlled)**

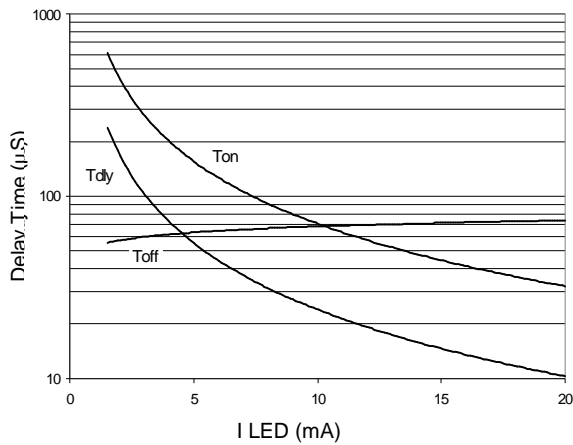


Figure 7. Typical Delay Times

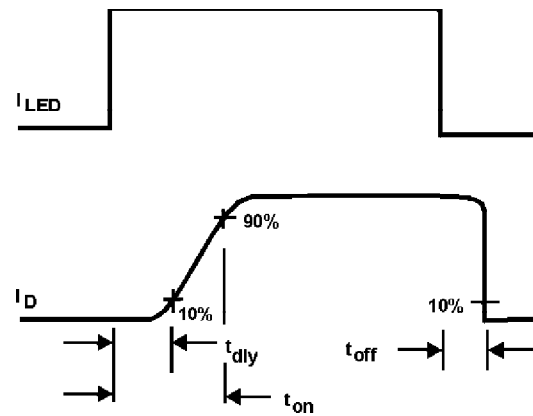


Figure 8. Delay Time Definitions

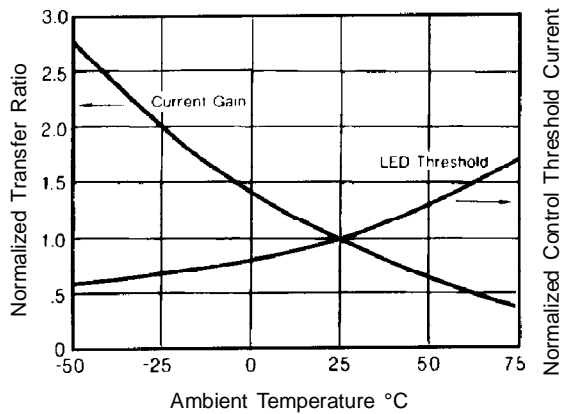


Figure 9. Typical Control Threshold and Transfer Ratio

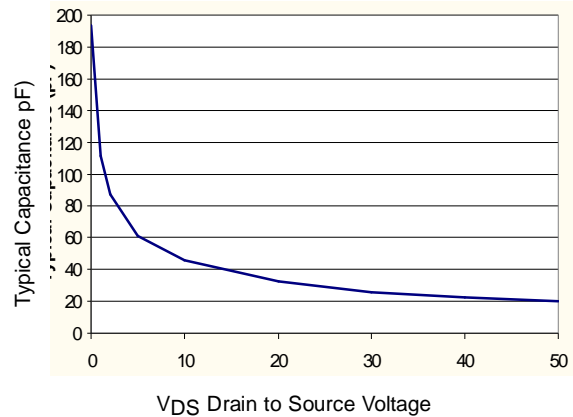
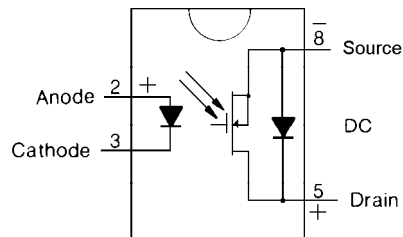
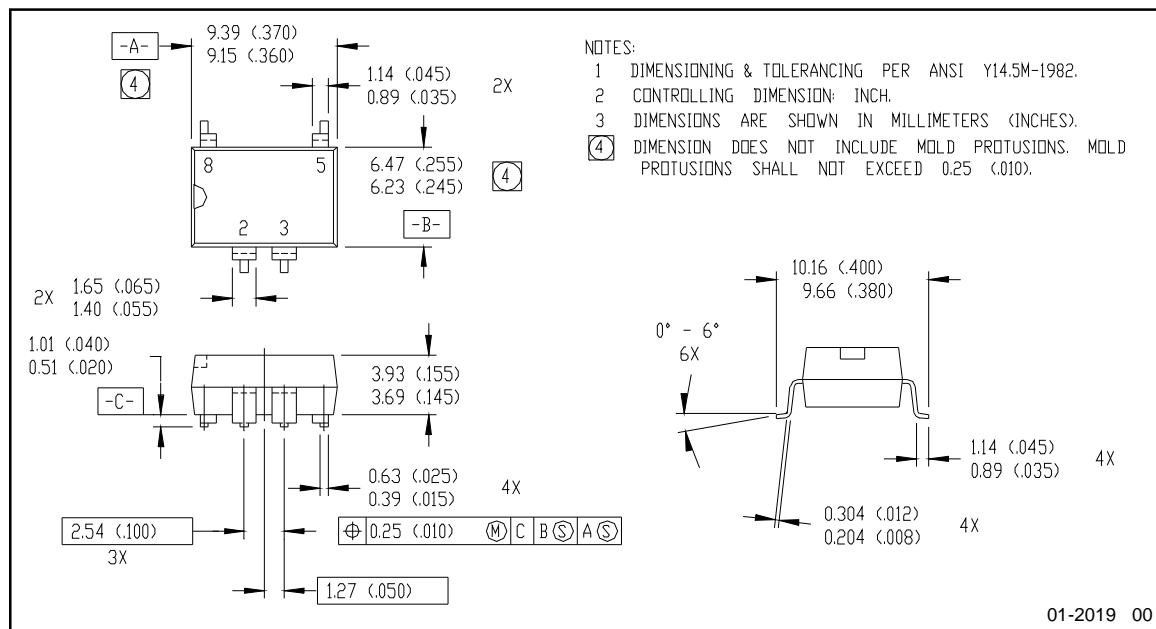
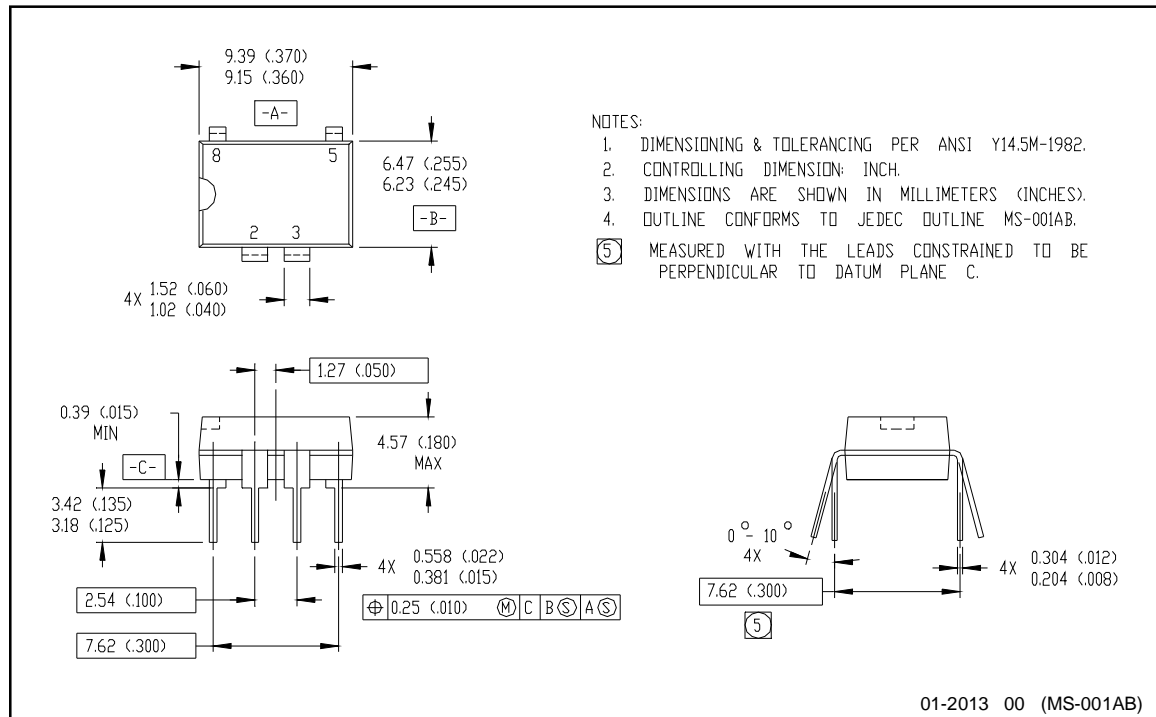


Figure 10. Typical Output Capacitance

Wiring Diagram



Case Outlines



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