

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

INPUT CHARACTERISTICS		Units
Minimum Control Current A Connection (see figure 1) For 170 Continuous Load Current For 165 Continuous Load Current For 130 Continuous Load Current	2.0 5.0 5.0	DC mA@25°C mA@40°C mA@85°C
Minimum Turn-Off Current	10	μA(DC)
Minimum Turn-Off Voltage	0.6	V(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	PVR2300N	PVR3300N, PVR3301N	Units
Operating Voltage Range	±200	±300	V _(peak)
Maximum Load Current 40°C I _{LED} = 5mA (see figure 1)			
AC (A Connection)	165		mA (peak)
DC (B Connection)	180		mA(DC)
DC (C Connection)	310		mA(DC)
Response Time @25°C (see figures 7 and 8)			
Maximum T _(on) @ 12mA Control, 100 mA Load, 100 VDC	150		μs
Maximum T _(off) @ 12mA Control, 100 mA Load, 100 VDC	125		μs
Maximum On-state Resistance 25°C (Pulsed) (fig. 2) 50 mA Load, 5mA Control			
AC (A Connection)	24		Ω
DC (B Connection)	12		Ω
DC (C Connection)	6		Ω
Minimum Off-state Resistance 25°C @ 160 VDC PVR2300, PVR3300	10 ⁹		Ω
@ 240 VDC PVR3301	10 ¹⁰		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)	6		pF @ 50VDC

GENERAL CHARACTERISTICS		Units
Dielectric Strength: Input-Output	1500	V _{RMS}
Insulation Resistance: Input-Output @ 500V _{DC}	10 ¹²	Ω
Maximum Capacitance: Input-Output	1.0	pF
Maximum Lead Soldering Temperature (1.6mm below seating plane for 10 sec.)	260	°C
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.

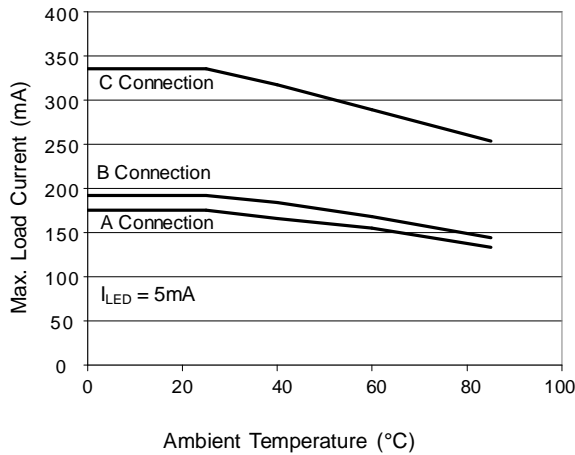


Figure 1. Current Derating Curve

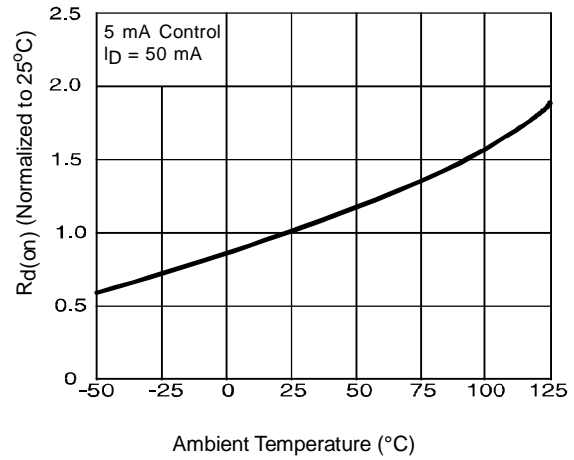


Figure 2. Typical On-Resistance

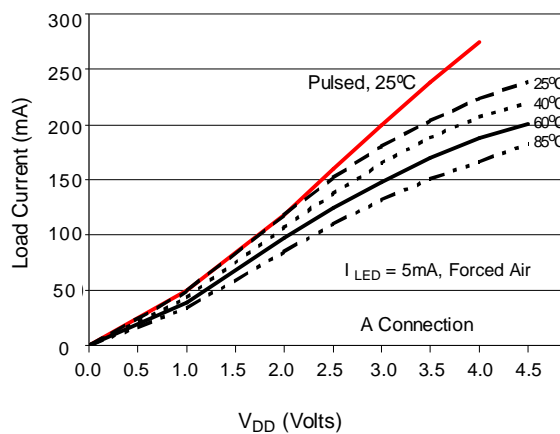


Figure 3. Typical On-Characteristic A Connection

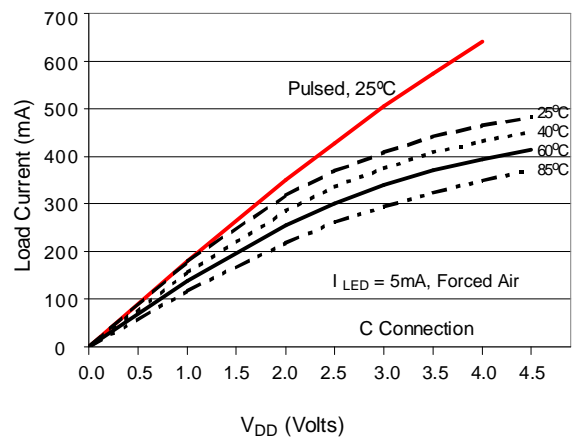


Figure 4. Typical On-Characteristic C Connection

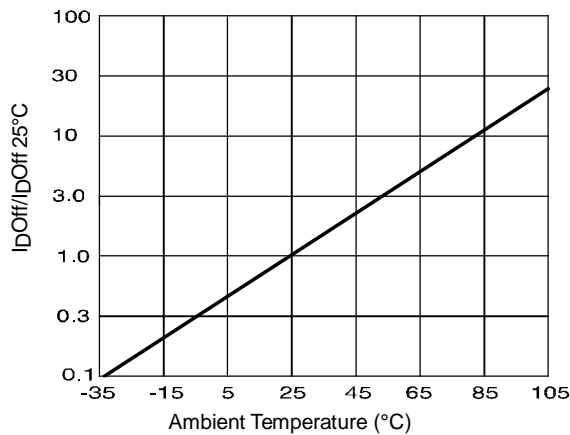


Figure 5. Typical Normalized Off-State Leakage

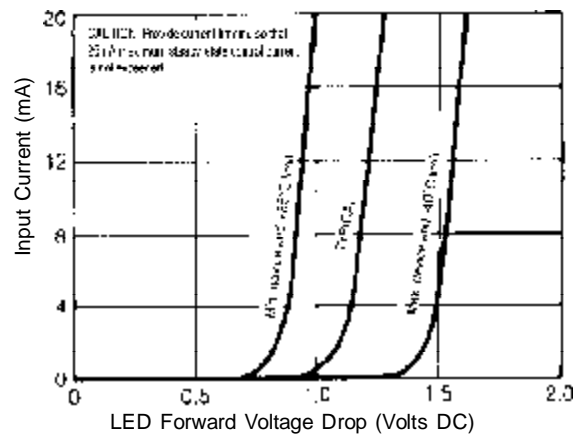


Figure 6. Input Characteristics (Current Controlled)

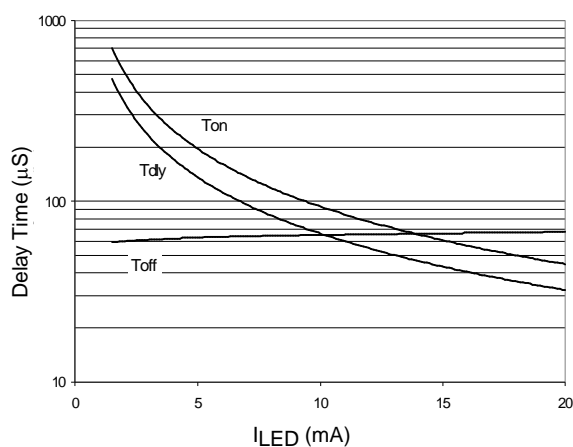


Figure 7. Typical Delay Times

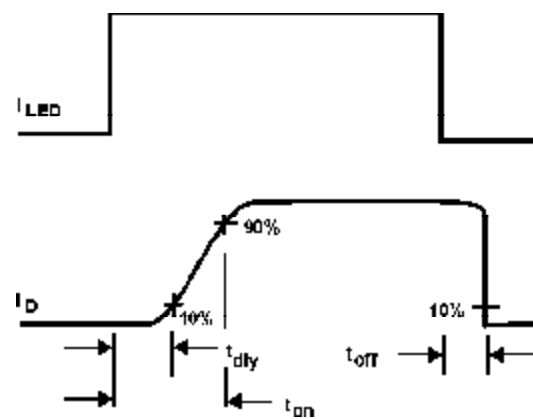


Figure 8. Delay Time Definitions

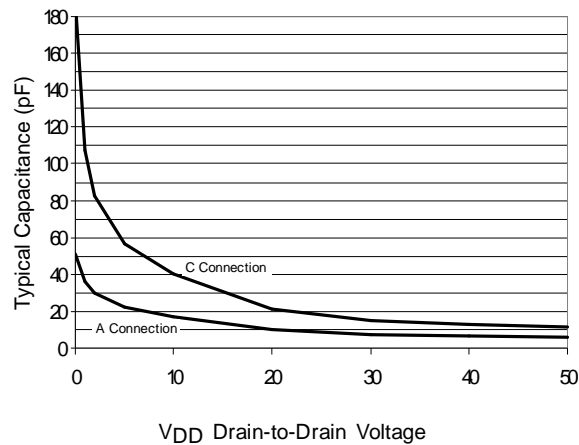
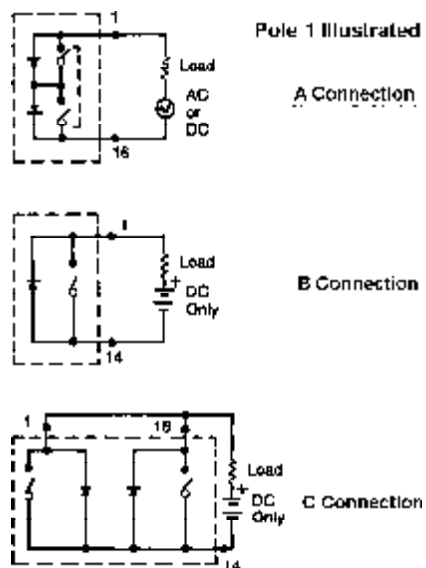
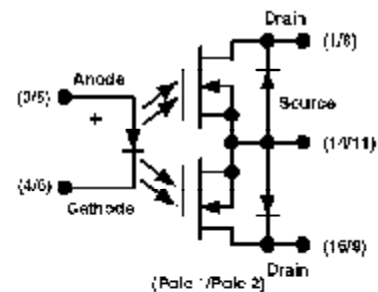


Figure 9. Typical Output Capacitance

Wiring Diagram



Schematic Diagram



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