

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

<b>INPUT CHARACTERISTICS</b>	<b>Limits</b>	<b>Units</b>
Minimum Control Current (see figure 1)	5.0	mA
Maximum Control Current for Off-State Resistance @ $T_A = +25^{\circ}\text{C}$	0.4	mA
Control Current Range (Caution: current limit input LED, see figure 6)	5.0 to 25	mA
Maximum Reverse Voltage	6.0	V

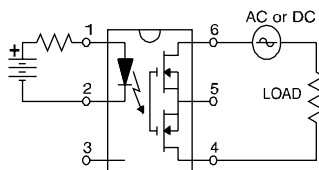
<b>OUTPUT CHARACTERISTICS</b>	<b>Limits</b>	<b>Units</b>
Operating Voltage Range	0 to $\pm 60$	V(DC or AC peak)
Maximum Load Current @ $T_A = +40^{\circ}\text{C}$ , 10mA Control (see figure 1)		
A Connection	1.0	A (AC or DC)
B Connection	1.5	A (DC)
C Connection	2.0	A (DC)
Maximum Pulsed Load Current @ $T_A = +25^{\circ}\text{C}$ (100 ms @ 10% Duty Cycle)		
A Connection	2.4A	(AC or DC)
Maximum On-State Resistance @ $T_A = +25^{\circ}\text{C}$ For 1A pulsed load, 10mA Control (see figure 4)		
A Connection	500	$\text{m}\Omega$
B Connection	250	$\text{m}\Omega$
C Connection	150	$\text{m}\Omega$
Maximum Off-State Leakage @ $T_A = +25^{\circ}\text{C}$ , $\pm 48\text{V}$ (see figure 5)	10	nA
Maximum Turn-On Time @ $T_A = +25^{\circ}\text{C}$ (see figure 7) For 500mA, 50 VDC load, 10mA Control	2.0	ms
Maximum Turn-Off Time @ $T_A = +25^{\circ}\text{C}$ (see figure 7) For 500mA, 50 VDC load, 10mA Control	0.5	ms
Maximum Output Capacitance @ 50VDC (see figure 2)	130	pF

<b>GENERAL CHARACTERISTICS</b>	<b>Limits</b>	<b>Units</b>
Minimum Dielectric Strength, Input-Output	4000	$\text{V}_{\text{RMS}}$
Minimum Insulation Resistance, Input-Output, @ $T_A = +25^{\circ}\text{C}$ , 50%RH, 100VDC	$10^{12}$	$\Omega$
Maximum Capacitance, Input-Output	1.0	pF
Maximum Pin Soldering Temperature (10 seconds maximum)	+260	$^{\circ}\text{C}$
Ambient Temperature Range:	Operating	
	Storage	

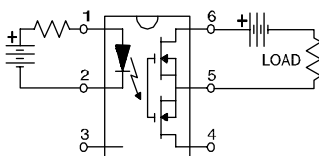
International Rectifier does not recommend the use of this product in aerospace, avionics, military or life support applications. Users of this International Rectifier product in such applications assume all risks of such use and indemnify International Rectifier against all damages resulting from such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

## Connection Diagrams

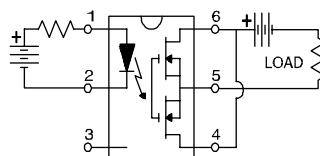
"A" Connection



"B" Connection



"C" Connection



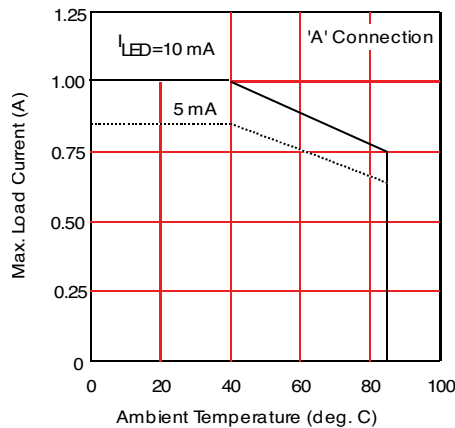


Figure 1. Current Derating Curves\*

\* Derating of 'B' and 'C' connection at +85°C will be 70% of that specified at +40°C and is linear from +40°C to +85°C.

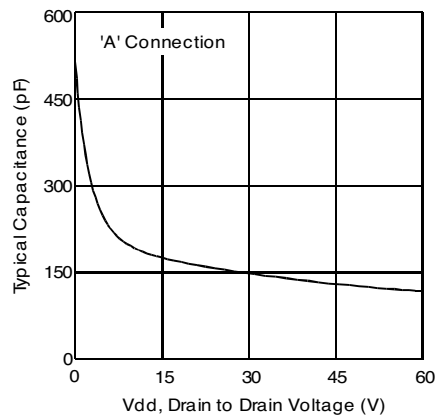


Figure 2. Typical Output Capacitance

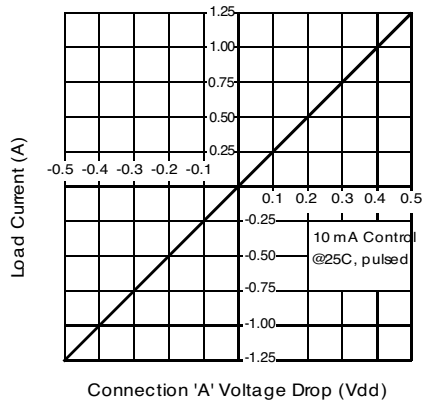


Figure 3. Linearity Characteristics

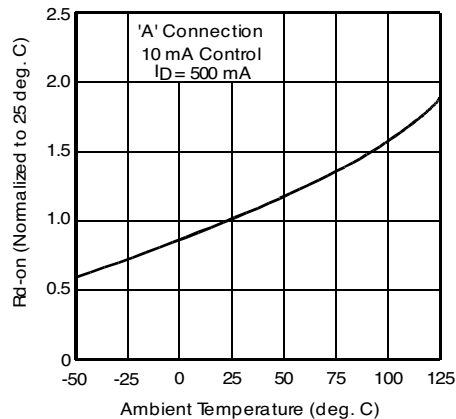


Figure 4. Typical Normalized On-Resistance

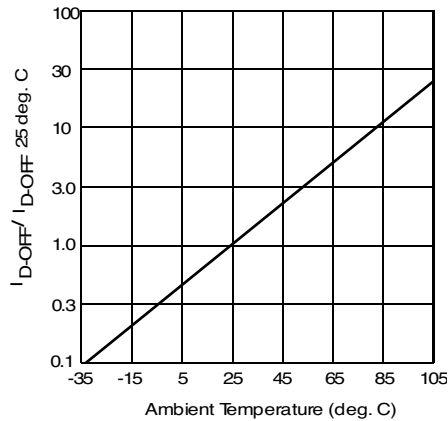


Figure 5. Typical Normalized Off-State Leakage

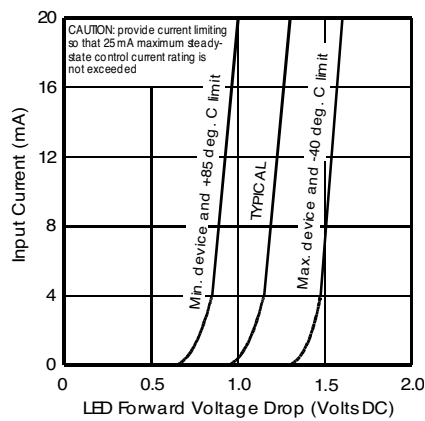


Figure 6. Input Characteristics (Current Controlled)

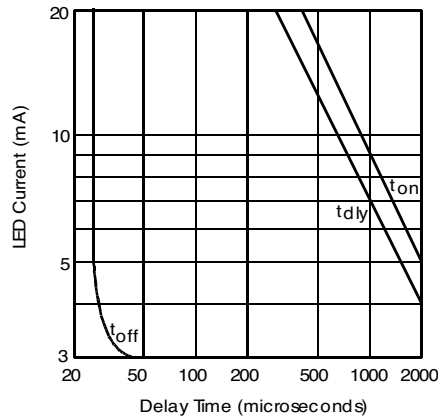


Figure 7. Typical Delay Times

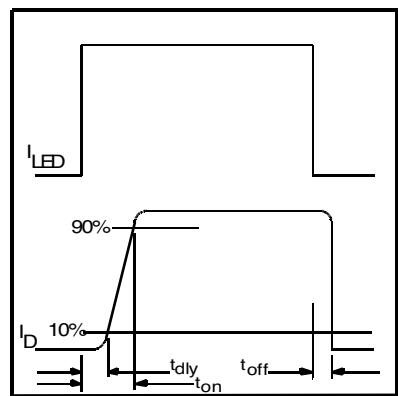


Figure 8. Delay Time Definitions

## Case Outlines

