Electrical Specifications (-40°C ≤ T_A ≤ +85°C unless otherwise specified)

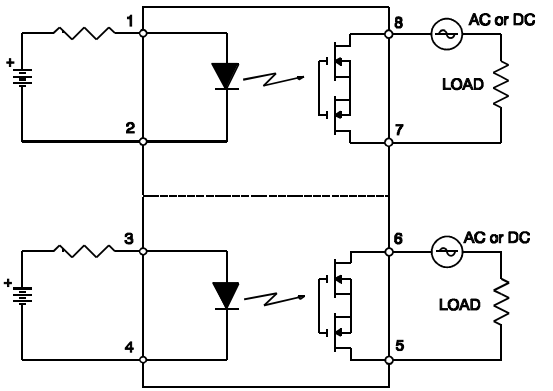
INPUT CHARACTERISTICS	Limits	Units
Minimum Control Current (See figure1)	2.0	mA
Maximum Control Current for Off-State Resistance @TA=+25°C	0.4	mA
Control Current Range (Caution: current limit input LED, see figure 5)	2.0 to 25	mA
Maximum Reverse Voltage	6.0	V

OUTPUT CHARACTERISTICS	Limits	Units
Operating Voltage Range	0 to ±400	$V_{(DC\ or\ AC\ peak)}$
Maximum Load Current @ T_A=+40°C 5mA Control (See figure 1) (single and dual channel operation)	120	mA
Maximum Peak Load Current (10ms maximum duration) (single and dual channel operation)	350	mA
Maximum On-State Resistance @T_A=+25°C For 50mA Pulsed load, 5mA Control (see figure3)	35	Ω
Maximum Off-State Leakage @T_A=+25°C, ±320V (see figure 4)	1.0	µA
Maximum Turn-On Time @T_A=+25°C (see figure 6) For 50mA, 100 V_{DC} load, 5mA Control	2.0	ms
Maximum Turn-Off Time @T_A=+25°C (see figure 6) For 50mA, 100 V_{DC} load, 5mA Control	2.0	ms
Maximum Output Capacitance @ 50V_{DC}	12	pF

GENERAL CHARACTERISTICS		Limits	Units
Minimum Dielectric Strength, Input-Output		4000	V_{RMS}
Minimum Dielectric Strength, Pole-to-Pole		1000	V_{DC}
Minimum Insulation Resistance, Input-Output, @T_A=+25°C, 50%RH, 100V_{DC}		10^{12}	Ω
Maximum Capacitance, Input-Output		1.0	pF
Maximum Pin Soldering Temperature (10 seconds maximum)		+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.

Connection Diagram



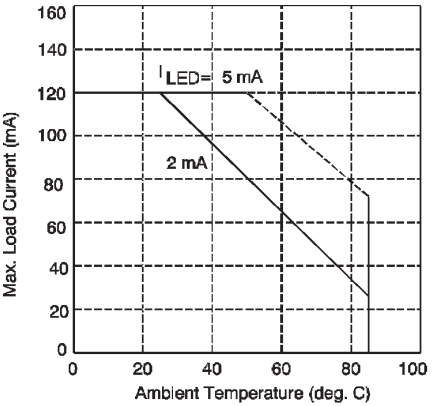


Figure 1. Typical Current Derating Curve

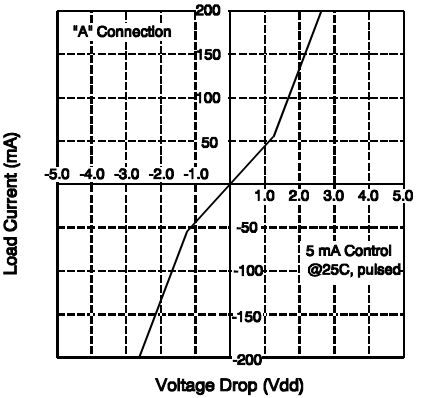


Figure 2. Linearity Characteristics

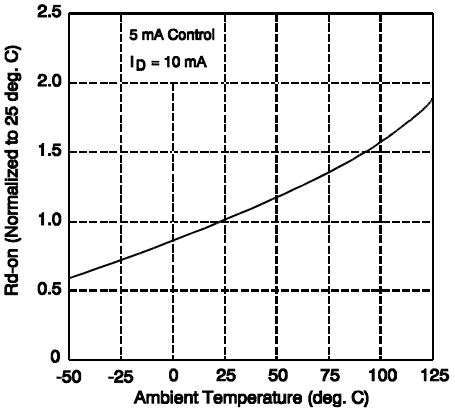


Figure 3. Typical Normalized On-Resistance

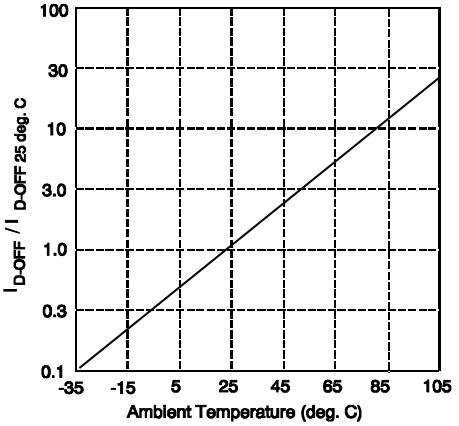


Figure 4. Typical Normalized Off-State Leakage

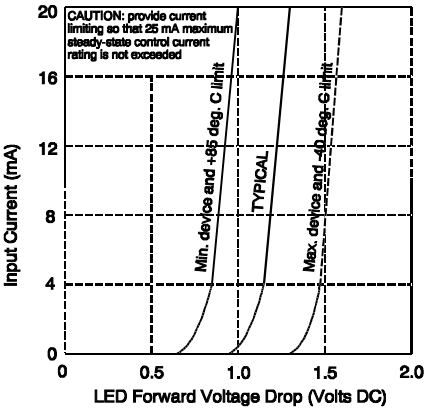


Figure 5. Input Characteristics (Current Controlled)

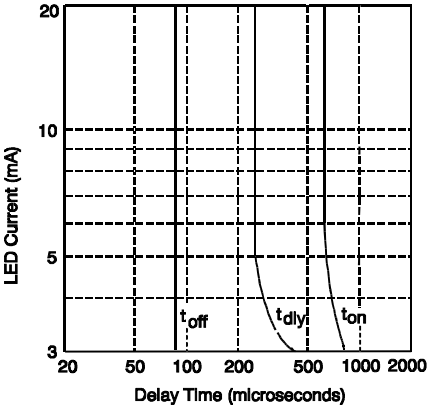


Figure 6. Typical Delay Times

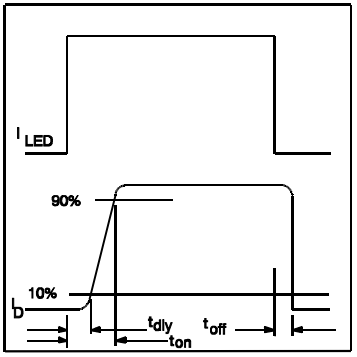


Figure 7. Delay Time Definitions

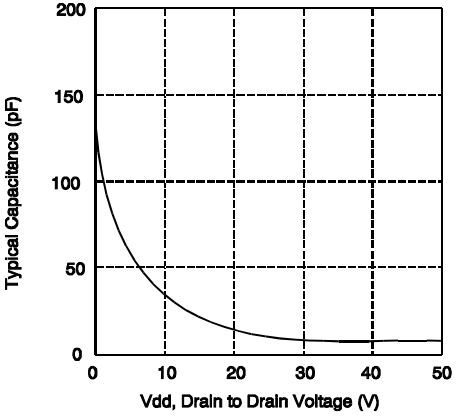
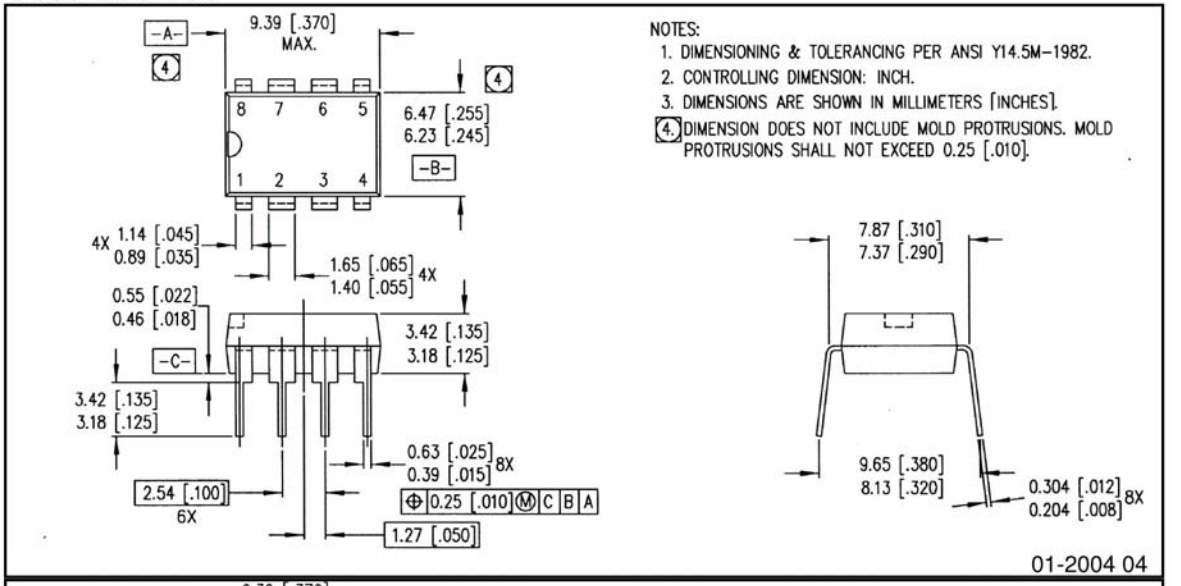
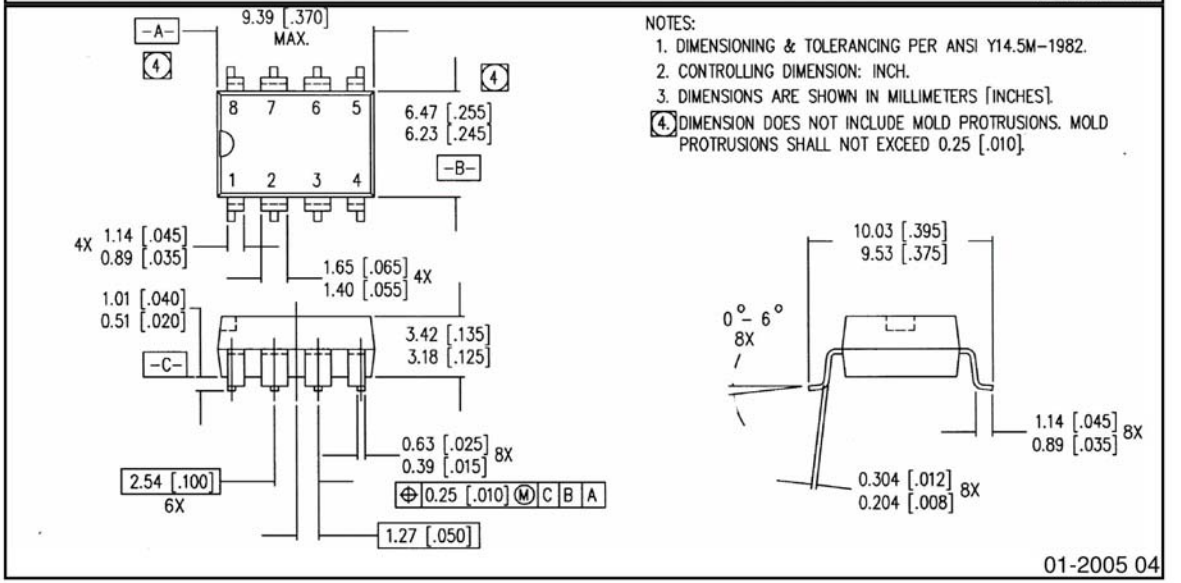


Figure 8. Typical Output Capacitance

Case Outlines





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

Qualification information†

Qualification level	Industrial (per JEDEC JESD47I †† guidelines)	
Moisture Sensitivity Level	PVT422PbF	N/A
	PVT422SPbF	MSL4 (per JEDEC J-STD-020E & JEDEC J-STD-033C ††)
	PVT422S-TPbF	
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
6/2/2015	• Added Qualification Information Table on page 6 • Updated data sheet with new IR corporate template

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