

Electrical Characteristics $T_A=25^\circ\text{C}$

Minimum and maximum values are testing requirements. Typical values are characteristics of the device and are the result of engineering evaluations. Typical values are for information only and are not part of the testing requirements.

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Input						
LED Forward Current, Switch Turn-on	I_{Fon}	—	1.0	2.0	mA	$I_L=100\text{ mA}$, $t=10\text{ ms}$
LED Forward Current, Switch Turn-off	I_{Foff}	0.2	0.9	—	mA	$V_L\pm 350\text{ V}$
LED Forward Voltage	V_F	1.15	1.26	1.45	V	$I_F=10\text{ mA}$
Output						
ON-resistance, ac/dc: Pin 4 ($\pm$) to 6 ($\pm$)	R_{ON}	—	20	35	Ω	$I_F=5.0\text{ mA}$, $I_L=50\text{ mA}$
ON-resistance, dc: Pin 4, 6 (+) to 5 (-)		—	5.00	10.0	Ω	$I_F=5.0\text{ mA}$, $I_L=100\text{ mA}$
OFF-resistance	R_{OFF}	0.5	5000	—	$G\Omega$	$I_F=0\text{ mA}$, $V_L=\pm 100\text{ V}$
Off-state Leakage Current	I_O	—	0.32	200	nA	$I_F=0\text{ mA}$, $V_L=\pm 100\text{ V}$
		—	—	1.0	mA	$I_F=0\text{ mA}$, $V_L=\pm 350\text{ V}$
Output Capacitance, Pin 4 to 6	C_O	—	55	—	pF	$I_F=0\text{ mA}$, $V_L=1.0\text{ V}$
		—	10	—	pF	$I_F=0\text{ mA}$, $V_L=50\text{ V}$
Switch Offset	—	—	0.15	—	μV	$I_F=5.0\text{ mA}$
Transfer						
Input/Output Capacitance	C_{ISO}	—	0.8	—	pF	$V_{ISO}=1.0\text{ V}$
Turn-on Time	t_{on}	—	2.0	3.0	ms	$I_F=5.0\text{ mA}$, $I_L=50\text{ mA}$
Turn-off Time	t_{off}	—	1.0	3.0	ms	$I_F=5.0\text{ mA}$, $I_L=50\text{ mA}$

Figure 1. Recommended Operating Conditions

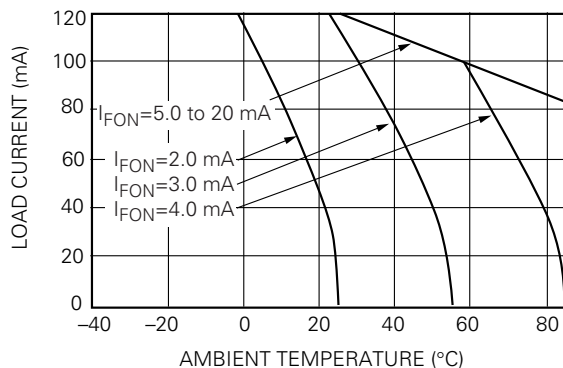


Figure 2. LED Voltage vs. Temperature

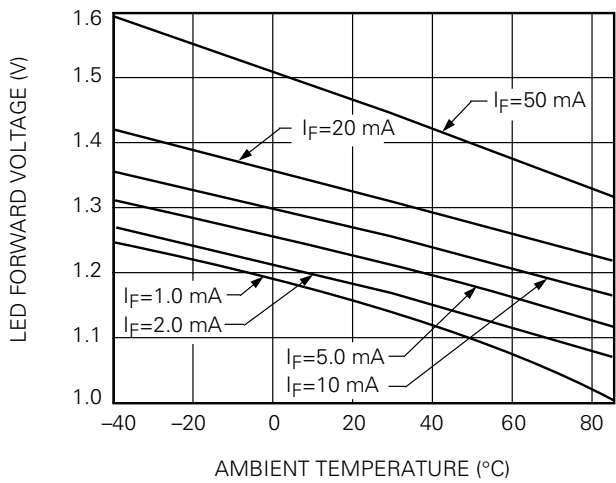


Figure 5. Current Limit vs. Temperature

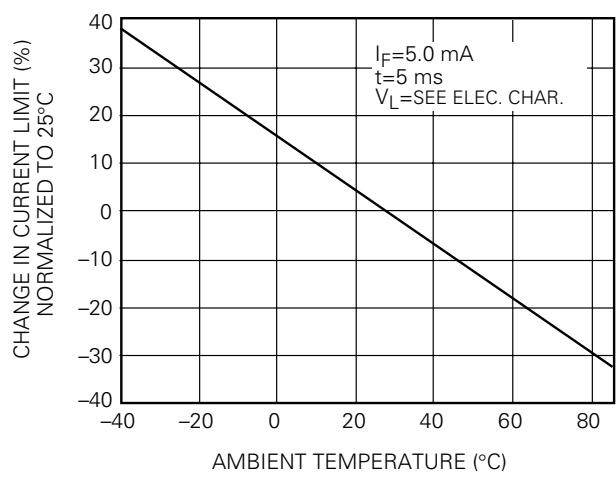


Figure 3. LED Current for Switch Turn-on vs. Temperature

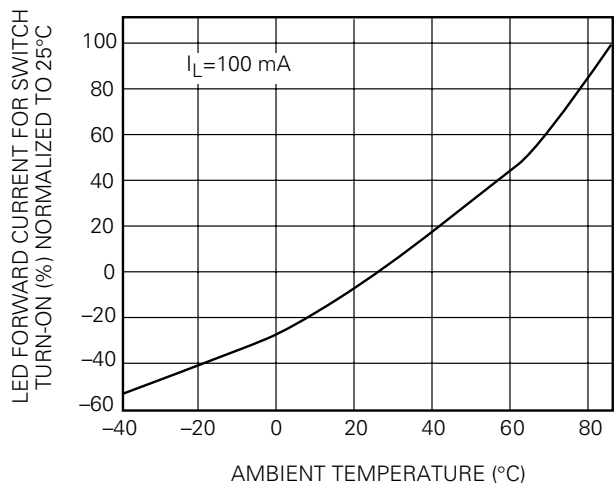


Figure 6. Switch Offset Voltage vs. LED Current

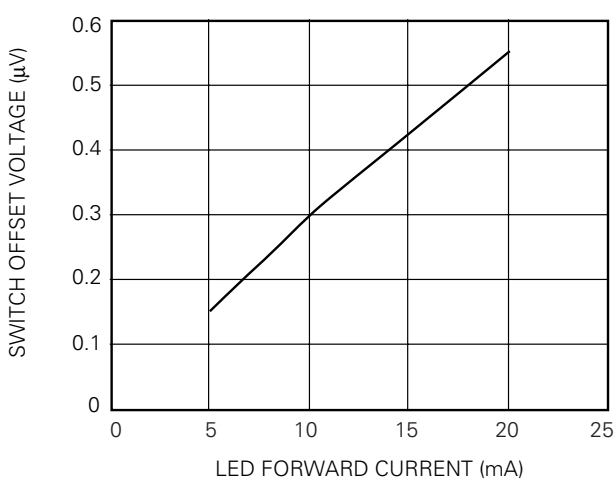


Figure 4. LED Dropout Voltage vs. Temperature

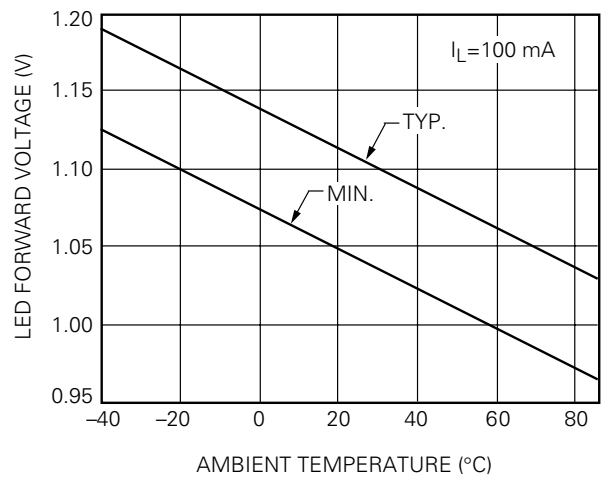


Figure 7. ON-Resistance vs. Temperature

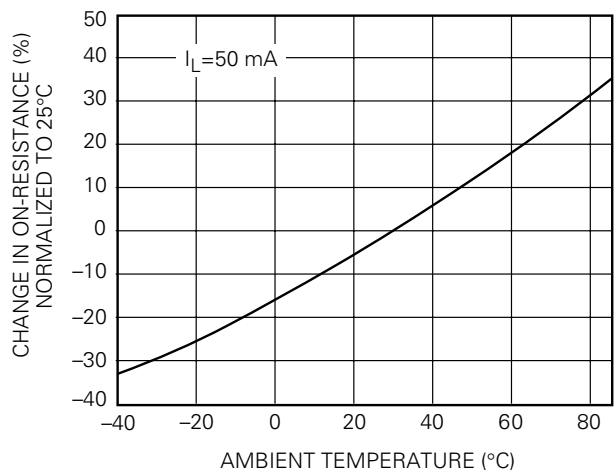


Figure 8. Variation in ON-Resistance vs. LED Current

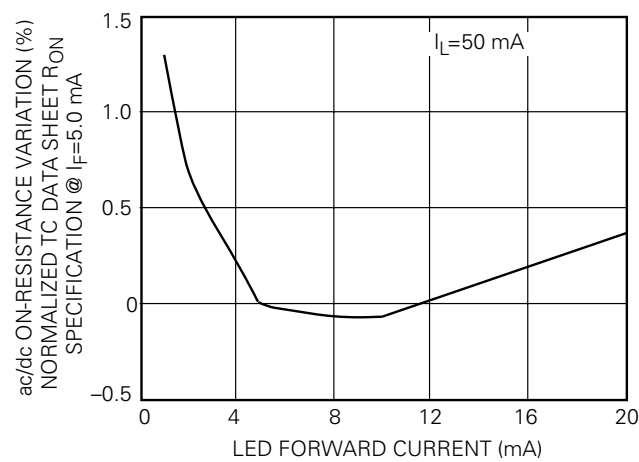


Figure 11. Output Isolation

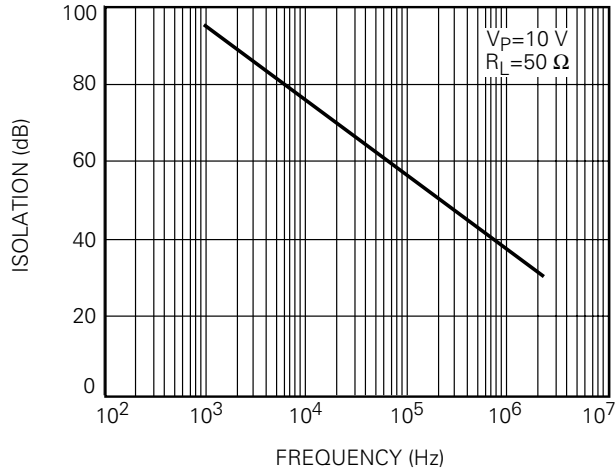


Figure 9. Switch Capacitance vs. Applied Voltage

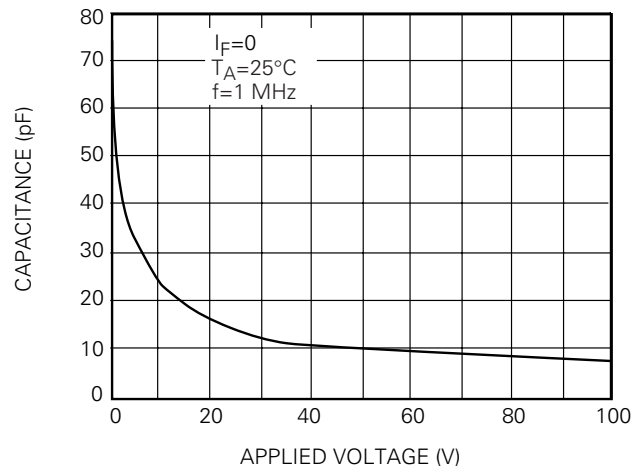


Figure 12. Leakage Current vs. Applied Voltage at Elevated Temperatures

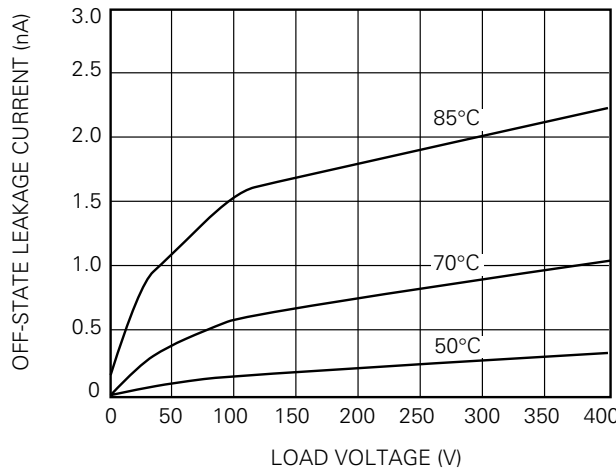


Figure 10. Insertion Loss vs. Frequency

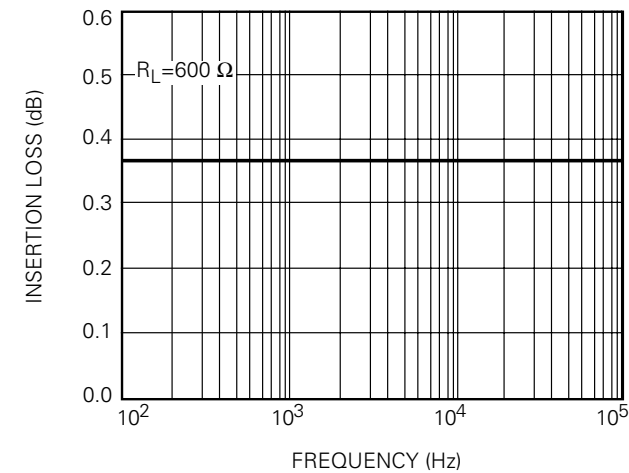


Figure 13. Switch Breakdown Voltage vs. Temperature

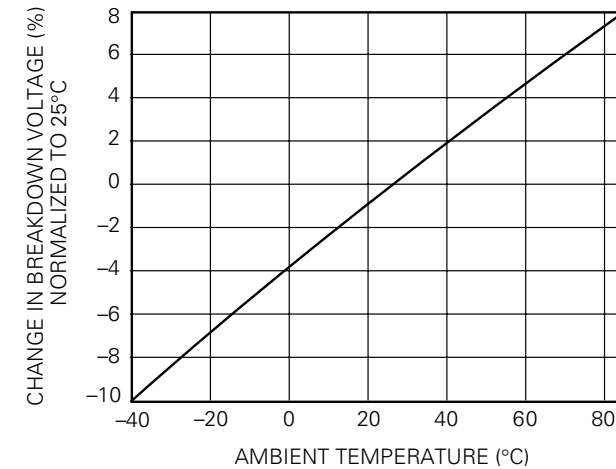


Figure 14. Switch Offset Voltage vs. Temperature

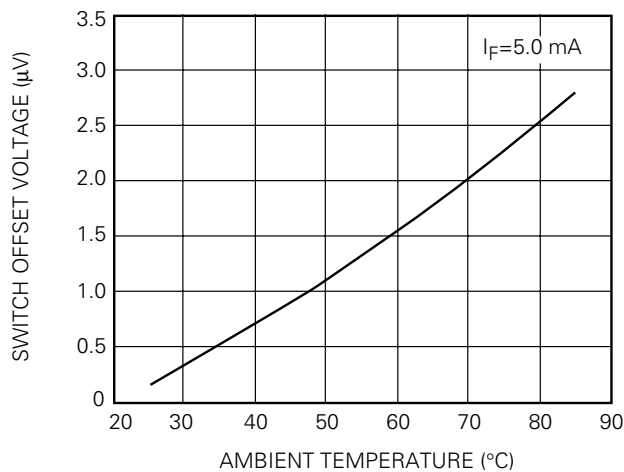


Figure 15. Turn-On Time vs. Temperature

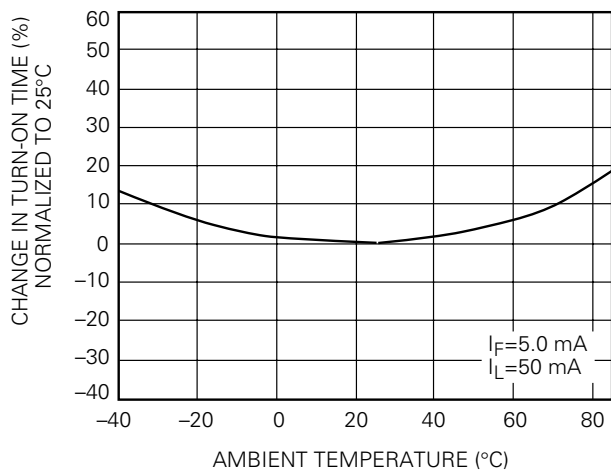


Figure 16. Turn-Off Time vs. Temperature

