

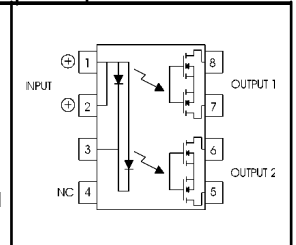
Photomos / **2 Form A** Solid State Relays

Model Number				LCA220	
Parameters					
Input Characteristics	Sym.	Test Conditions	Units	2 Form A	
LED Forward Current - Turn on	I_{Fon}	$I_L = 100mA, t = 10ms$	mADC	Max Typ	10 3.4
LED Forward Current - Turn off	I_{Foff}	$I_L = 0.2mA, V_L = (Note 1)$	mADC	Min Typ	0.1 3.0
Recommended Forward Current	I_F		mADC	Min Max	15 40
LED Forward Voltage	V_F	$I_F = 20mA$	VDC	Min Max	1.1 1.4
Maximum Input Ratings					
LED Forward Current	I_F		mADC	Max	50
LED Reverse Voltage Withstand	V_R	$I_R = 10mA$	VDC	Max	10
Output Characteristics					
Switching Voltage	V_L	$I_L = 50mA$	V PEAK	Max	15
Switching Current	I_L	Each Channel Both Ch.'s Simultaneously	mA mA	Max Max	250 150
Current Limit	I_{Lmt}	$I_F = 5mA, t = 5ms$	mA	Min Max	n/a n/a
On Resistance	R_{on}	$I_F = 5mA/0mA, I_L = 50mA$	W	Max	8
Off State Resistance	R_{off}	$I_F = 0mA, V_L = 15V$	GW	Min Typ	0.5 5000
Off State Leakage	I_{off}	$I_F = 0mA, V_L = 15V$	nA	Max Typ	200 0.5
	I_{off}	$I_F = 0mA, V_L = Max$	mA	Max	1
Turn On Time	T_{on}	$I_F = 10mA, I_L = 50mA$	ms	Max	1.5
Turn Off Time	T_{off}	$I_F = 10mA, I_L = 50mA$	ms	Max	0.5
Capacitance Across Output		$I_F = 0mA, V_L = 1V$	pF	Typ	40
		$I_F = 0mA, V_L = 50V$	pF	Typ	-
Thermal Offset Voltage		$I_F = 10mA$	mV	Typ	0.2
General Characteristics					
Dielectric Strength - Input to Output		$t = 60sec$	VRMS	Min	3750
Capacitance - Input to Output			pF	Typ	1.2
Power Dissipation	P_{Diss}		mW	Max	600

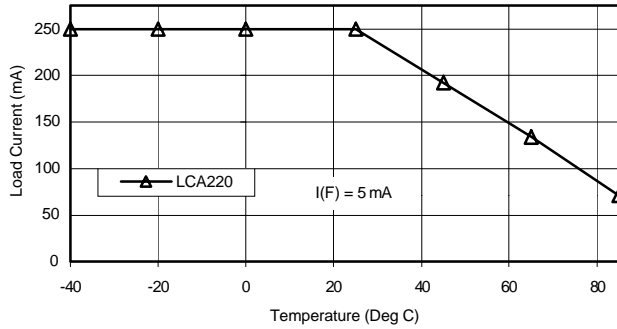
Notes:

- 1: V_L for LED Forward Current - Turn Off is 50 Volts less than "Switching Voltage Max".
- 2: Specifications subject to change without notice.

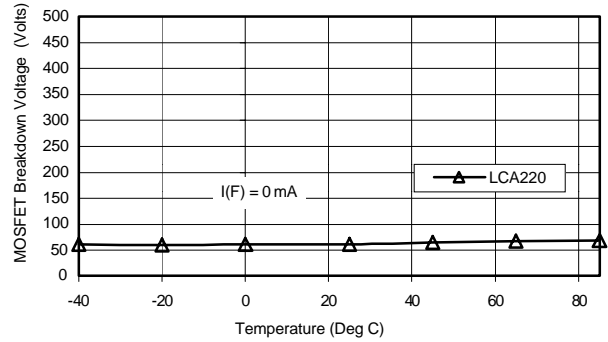
Schematic Top View:
Mold mark on top of relay indicates Pin #1



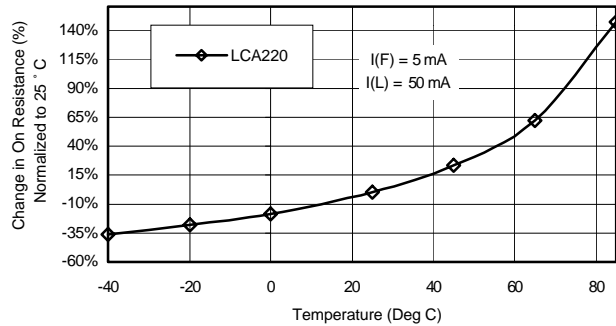
Photomos / 2 FORM A



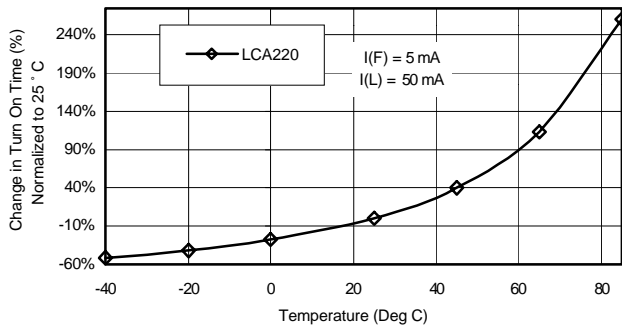
A. Load Current vs. Ambient Temperature



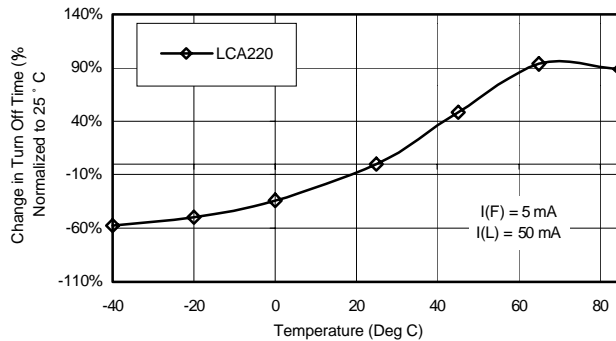
B. Output MOSFET BV vs. Ambient Temperature



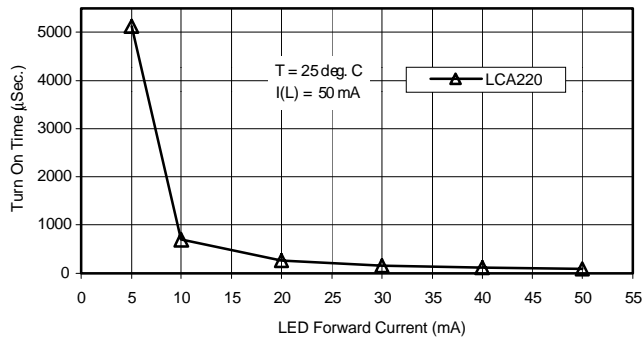
C. On-Resistance vs. Ambient Temperature



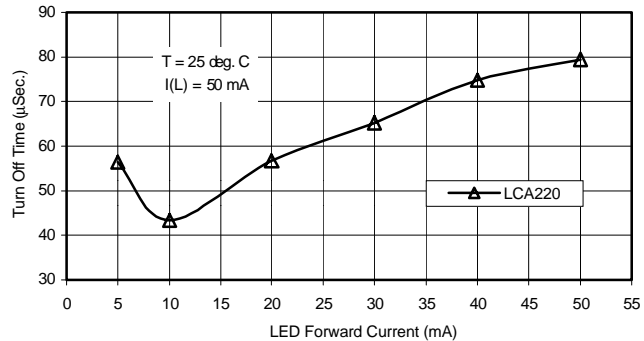
D. On Time vs. Ambient Temperature



E. Turn Off Time vs. Ambient Temperature



F. Turn On Time vs. LED Forward Current



G. Turn Off Time vs. LED Forward Current

For recommended applications and more information contact:
USA: Sales Support (877) 502-5500 **Tech Support** (877) 702-7700 **FAX** (619) 710-8540
 Crydom Corp, 2320 Paseo de las Americas, Ste. 201, San Diego, CA 92154
Email: sales@crydom.com **WEB SITE:** http://www.crydom.com

UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email:** intsales@crydom.com.
GERMANY: +49 (0)180 3000 506