

G2 Series/ 1 FORM A

Solid State Relays

CRYDOM

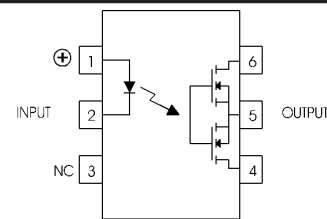
Control over power

Model Number	G2-1A02 G2-1A03 G2-1A05 G2-1A06 G2-1A07				
Parameters	Sym.	Test Conditions	Units	1 Form A	1 Form A
Input Characteristics					
LED Forward Current - Turn on	I_{Fon}	$I_L = 100mA, t = 10ms$	mADC	Max Typ	5.0 2.0
LED Forward Current - Turn off	I_{Foff}	$I_L = 0.2mA, V_L = (Note 1)$	mADC	Min Typ	0.1 1.8
Recommended Forward Current	I_F		mADC	Min Max	10 30
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	$I_R = 10mA$		Max	10
Output Characteristics					
Switching Voltage	V_L	$I_L = 50mA$	V PEAK	Max	400
Switching Current: AC Mode(Note2)	I_L	Pin 4 to Pin 6	mA	Max	150
Switching Current: DC Mode(Note2)	I_L	Pins 5(-) to Pins 4&6 (+)	mA	Max	250
Current Limit: AC Mode(Note2)	I_{Lmt}	$I_F = 5mA, t = 5ms$	mA	Typ	380
Current Limit: DC Mode(Note2)	I_{Lmt}	$I_F = 5mA, t = 5ms$	mA	Typ	540
On Resistance: AC Mode(Note2)	R_{on}	$I_F = 5mA, I_L = 50mA$		Max	24
On Resistance: DC Mode(Note2)	R_{on}	$I_F = 5mA, I_L = 50mA$		Max	6
Off State Resistance	R_{off}	$I_F = 0mA, V_L = 100V$	G	Min Typ	0.5 5000
Off State Leakage	I_{off}	$I_F = 0mA, V_L = 100V$	nA	Max Typ	200 0.5
	I_{off}	$I_F = 0mA, V_L = Max$	mA	Max	1
Turn On Time	T_{on}	$I_F = 5mA, I_L = 50mA$	ms	Max	5.0
Turn Off Time	T_{off}	$I_F = 5mA, I_L = 50mA$	ms	Max	1.0
Capacitance - Across Output		$I_F = 0mA, V_L = 1V$	pF	Typ	95
		$I_F = 0mA, V_L = 50V$	pF	Typ	10
Thermal Offset Voltage		$I_F = 5mA$	mV	Typ	0.2
General Characteristics					
Dielectric Strength - Input to Output		$t = 60sec$	VRMS	Min	3750
Capacitance - Input to Output			pF	Typ	0.8
Power Dissipation	P_{Diss}		mW	Max	500

Notes:

- 1: V_L for LED Forward Current - Turn Off is 50 Volts less than "Switching Voltage : Max".
- 2: See "AC Mode and DC Mode Operation" on Page 67 for further description of AC and DC Mode.
- 3: Specifications subject to change without notice.

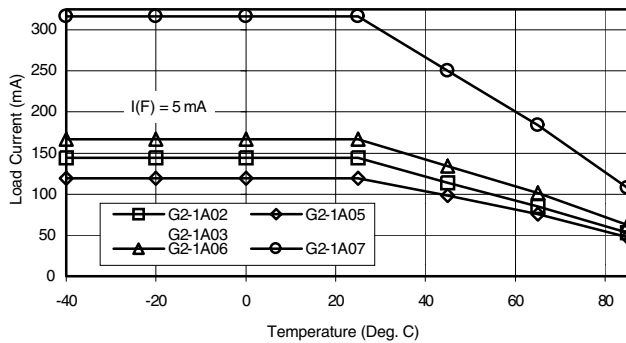
* $I_F = 10mA$



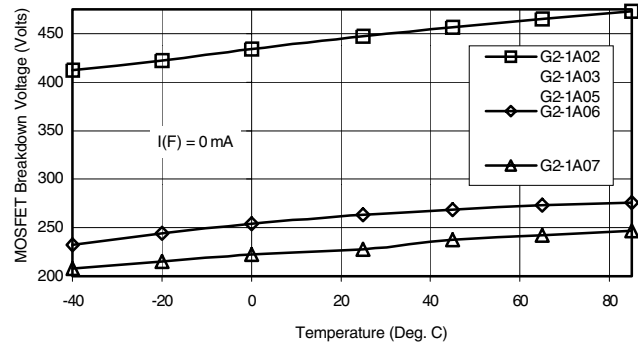
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 WEB SITE: <http://www.crydom.com> **FASTFAX Product Information:** (888) 267-9191

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GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH.

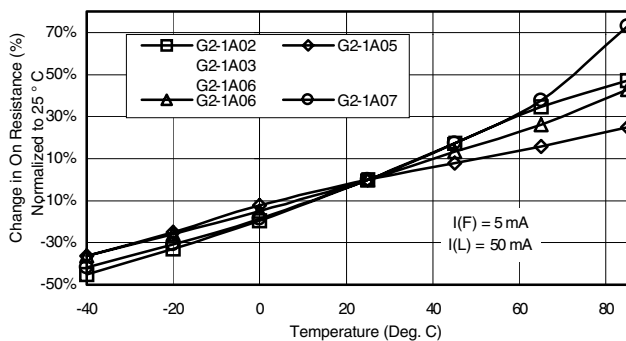
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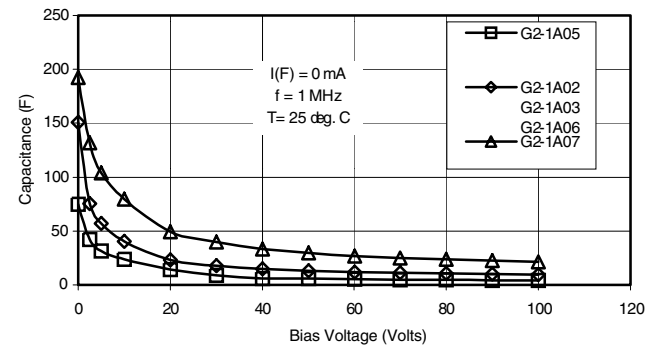
A. Load Current vs. Ambient Temperature



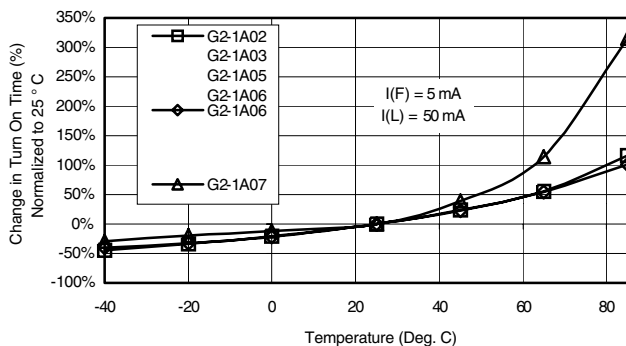
B. Output MOSFET BV vs. Ambient Temperature



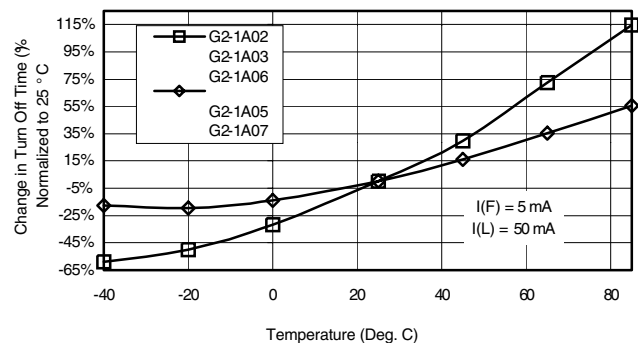
C. On-Resistance vs. Ambient Temperature



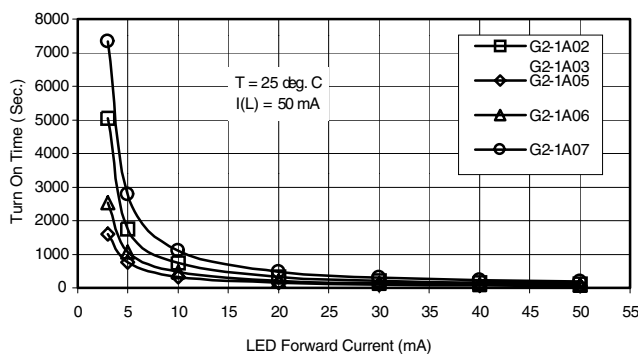
D. Output Capacitance vs. Applied Voltage



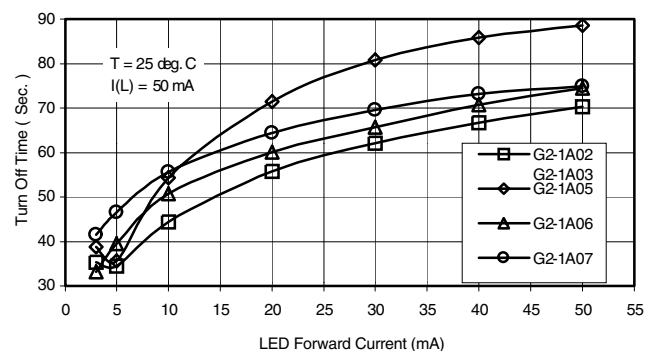
E. On Time vs. Ambient Temperature



F. Turn Off Time vs. Ambient Temperature



G. Turn On Time vs. LED Forward Current



H. Turn Off Time vs. LED Forward Current