

OptoMOS® Solid State Switches

1 Form A Relays

Specifications

Output Characteristics @ 25°C

Part Number	PLA110	PLA140	PLA150	LCA110	LCA120	LCA125	LCA127	LCA710	OMA160	Units
Contact Form	1 Form A	1 Form A	1 Form A	1 Form A	1 Form A	1 Form A	1 Form A	1 Form A	1 Form A	
Load Voltage (Peak)	400	400	250	350	250	300	250	60	250	V
Load Current (Continuous)										
X-Configuration	150	250	170	120	170	170	170	1000	50	mA
Y-Configuration	210	350	300	200	300	300	300	1800	80	
Peak Load Current (10mSec Max.)	400	500	500	350	400	400	400	5000	100	mA
On-Resistance @ Rated Load Current										
X-Configuration										
Typ	15	6	5	23	12	10	8	0.3	50	Ω
Max	22	8	7	35	20	16	10	0.5	100	
Y-Configuration										
Typ	5	2	1	7	4	4	2	0.1	15	
Max	7	3	2	10	6	5	3	0.15	30	
Off State Leakage Current @ Rated Load Voltage										
Max	1	1	1	1	1	1	1	1	0.025	μA
Switching Times										
Control Current	5	5	5	2/5	5	5	5	10	10	mA
TON										
Typ	0.4	0.6	0.8	1.2/1	1.2	1.2	3	1	0.085	mS
Max	1	1.5	2.5	5/3	5	5	5	2.5	0.125	
TOFF										
Typ	0.1	0.1	0.1	1/1	1	1	2	0.06	0.050	mS
Max	0.25	0.25	0.25	3/3	5	5	5	0.25	0.125	
Output Capacitance @ 50V, f = 1MHz										
Typ	35	110	110	25	50	50	110	220	5	pF

Input Characteristics @ 25°C

Input Control Current I _{LED}										
Min	5	5	5	2	5	5	5	10	10	mA
Max	100	100	100	100	100	100	100	100	100	
Input Dropout Current I _{LED}										
Min	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	mA
Typ	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
Input Voltage Drop V _F @ 5mA										
Min	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	V
Typ	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Max	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Reverse Input Voltage										
Max	5	5	5	5	5	5	5	5	5	V
Reverse Input Current										
Max	10	10	10	10	10	10	10	10	10	μA

Input to Output Capacitance										
Typ	3	3	3	3	3	3	3	3	3	pF
Input to Output Isolation										
With "E" Suffix (optional)	2500	2500	2500	2500	2500	2500	2500	2500	2500	V _{RMS}
	3750	3750	3750	3750	3750	3750	3750	3750	3750	
Current Limiting ¹ Version Available										
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	

¹ Current limiting adds 5 ohms to the total on-resistance of the device.

OptoMOS® Solid State Switches

1 Form B Relays

Specifications

Output Characteristics @ 25°C

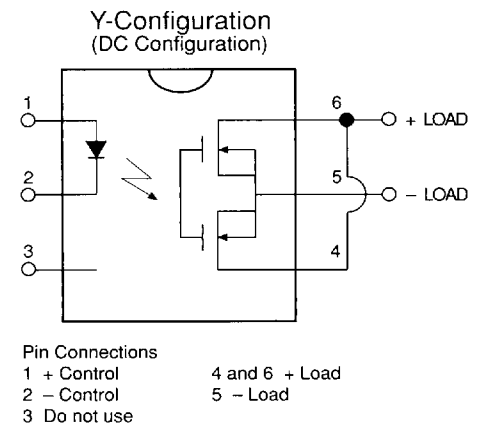
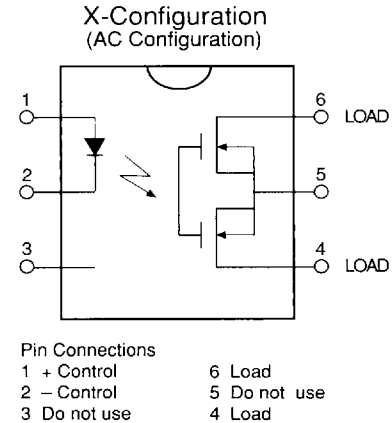
Part Number		LCB110	LCB120	LCB127	Units
Contact Form		1 Form B	1 Form B	1 Form B	
Load Voltage (Peak)		350	250	250	V
Load Current (Continuous)					
X-Configuration		120	170	170	mA
Y-Configuration		200	300	300	
Peak Load Current (10mSec Max.)		350	400	400	mA
On-Resistance @ Rated Load Current					
X-Configuration	Typ	23	16	8	Ω
	Max	35	20	10	
Y-Configuration	Typ	7	5	2	
	Max	10	6	3	
Off State Leakage Current @ Rated Load Voltage	Max	1	1	1	μA
Switching Times					
Control Current		5	5	5	mA
T _{ON}	Typ	0.5	1	2	mS
	Max	3	5	5	
T _{OFF}	Typ	0.7	1.2	3	mS
	Max	3	5	5	
Output Capacitance @ 50V, f = 1MHz	Typ	25	50	100	pF

Input Characteristics @ 25°C

Input Control Current I _{LED}	Min	5	5	5	mA
	Max	100	100	100	
Input Dropout Current I _{LED}	Min	0.4	0.4	0.4	mA
	Typ	0.7	0.7	0.7	
Input Voltage Drop V _F @ 5mA	Min	0.9	0.9	0.9	V
	Typ	1.2	1.2	1.2	
	Max	1.4	1.4	1.4	
Reverse Input Voltage	Max	5	5	5	V
Reverse Input Current	Max	10	10	10	μA

Input to Output Capacitance	Typ	3	3	3	pF
Input to Output Isolation		2500	2500	2500	V _{RMS}
With "E" Suffix (optional)		3750	3750	3750	
Current Limiting ¹ Version Available		No	No	No	

¹ Current limiting adds 5 ohms to the total on-resistance of the device.



NOTE:
 For Mechanical Dimensions refer to page 20.