

COMMON INPUT OptoMOS® RELAYS

LCC110



DESCRIPTION

LCC110 is a 350V, 120mA, 35Ω 1-Form-C relay. It is ideal for applications focused on peak load voltage handling capabilities.

FEATURES

- Small 8 Pin DIP Package
- Low Drive Power Requirements (TTL/CMOS Compatible)
- No Moving Parts
- High Reliability
- Arc-Free With No Snubbing Circuits
- 3750V_{RMS} Input/Output Isolation
- FCC Compatible
- VDE Compatible
- No EMI/RFI Generation
- Machine Insertable, Wave Solderable
- Current Limiting, Surface Mount and Tape & Reel Versions Available

APPROVALS

- UL Recognized: File Number E76270
- CSA Certified: File Number LR 43639-10
- BSI Certified:
 - BS EN 60950:1992 (BS7002:1992) Certificate #:7344
 - BS EN 41003:1993 Certificate #:7344

OPTIONS / SUFFIXES

- S: Surface Mount Package
- TR: Tape & Reel

APPLICATIONS

- Telecommunications
 - Telecom Switching
 - Tip/Ring Circuits
 - Hookswitch
 - Dial Pulsing
 - Ground Start
 - Ringer Injection
- Instrumentation
 - Multiplexers
 - Data Acquisition
 - Electronic Switching
 - I/O Subsystems
 - Meters (Watt-Hour, Water, Gas)
- Medical Equipment-Patient/Equipment Isolation
- Security
- Aerospace
- Industrial Controls

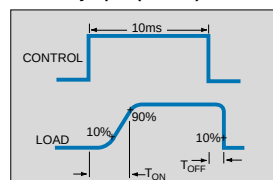
RATINGS (@ 25° C)

Parameter	Min	Typ	Max	Units
Input Power Dissipation	-	-	150 ¹	mW
Input Control Current	-	-	50	mA
Peak (10ms)	-	-	1	A
Reverse Input Voltage	-	-	5	V
Total Power Dissipation	-	-	800 ²	mW
Capacitance				
Input to Output	-	3	-	pF
Isolation Voltage				
Input to Output	3750	-	-	V _{RMS}
Operational Temperature	-40	-	+85	°C
Storage Temperature	-40	-	+125	°C
Soldering Temperature				
DIP Package	-	-	+260	°C
Surface Mount Package	-	-	+220	°C
(10 Seconds Max.)				

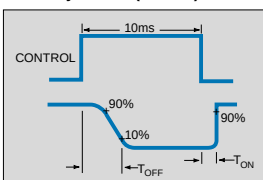
¹ Derate Linearly 1.33 mW/°C

² Derate Linearly 6.67 mW/°C

Switching Characteristics of Normally Open (Form A) Devices



Switching Characteristics of Normally Closed (Form B) Devices



Note: For Mechanical Dimensions See Pages 408-415

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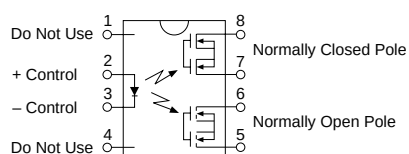
SPECIFICATIONS

PARAMETER	CONDITIONS	SYMBOL	MIN	TYP	MAX	UNITS
Output Characteristics @ 25°C						
Load Voltage (Peak)	-	V_L	-	-	350	V
Load Current* (Continuous) AC/DC Configuration	-	I_L	-	-	120	mA
Peak Load Current	10ms	I_{LPK}	-	-	350	mA
On-Resistance AC/DC Configuration	$I_L=120\text{mA}$	R_{ON}	-	23	35	Ω
Off-State Leakage Current	$V_L=350\text{V}$	I_{LEAK}	-	-	1	μA
Switching Speeds	$I_F=8\text{mA}$, $V_L=10\text{V}$ $I_F=8\text{mA}$, $V_L=10\text{V}$	T_{ON}	-	-	4	ms
Turn-On		T_{OFF}	-	-	4	ms
Turn-Off						
Output Capacitance	50V; f=1MHz	C_{OUT}	-	25	-	pF
Input Characteristics @ 25°C						
Input Control Current	$I_L=120\text{mA}$	I_F	8	-	50	mA
Input Dropout Current	-	I_F	0.4	0.7	-	mA
Input Voltage Drop	$I_F=8\text{mA}$	V_F	0.9	1.2	1.4	V
Reverse Input Voltage	-	V_R	-	-	5	V
Reverse Input Current	$V_R=5\text{V}$	I_R	-	-	10	μA
Input to Output Capacitance	-	$C_{I/O}$	-	3	-	pF
Input to Output Isolation	-	$V_{I/O}$	3750	-	-	V_{RMS}

*NOTE: If both poles operate simultaneously load current must be derated so as not to exceed the package power dissipation value.

LCC110 Pinout

AC/DC Configuration

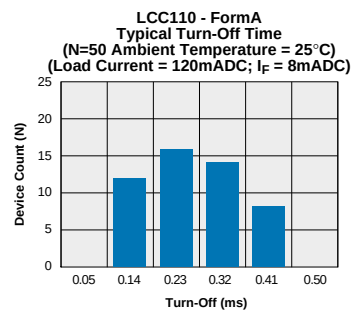
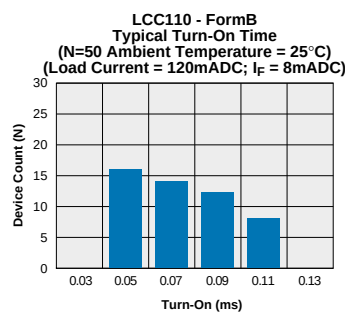
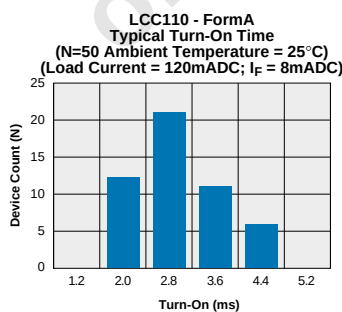
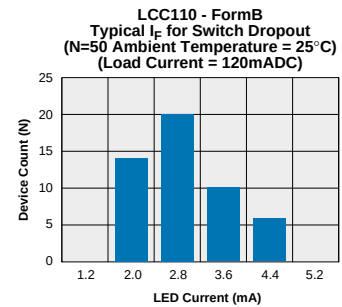
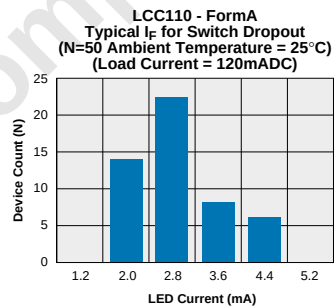
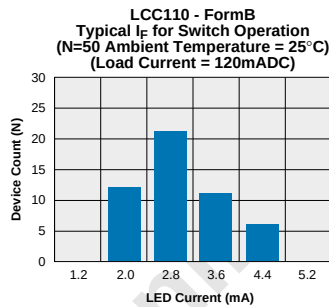
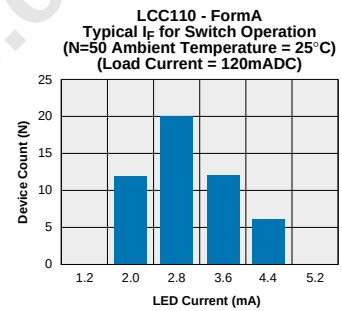
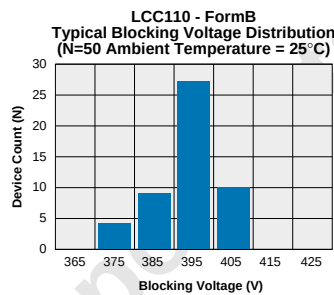
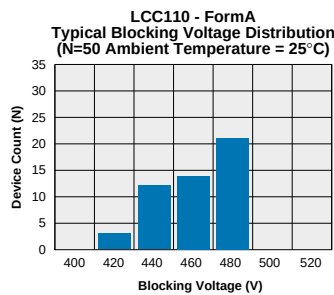
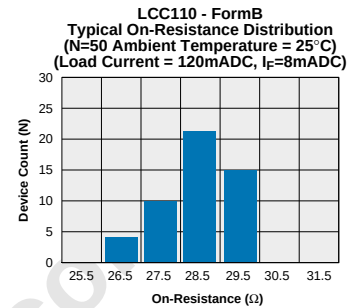
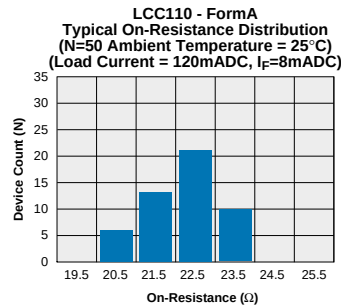
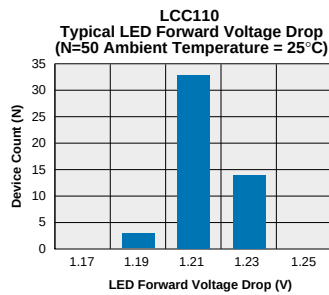


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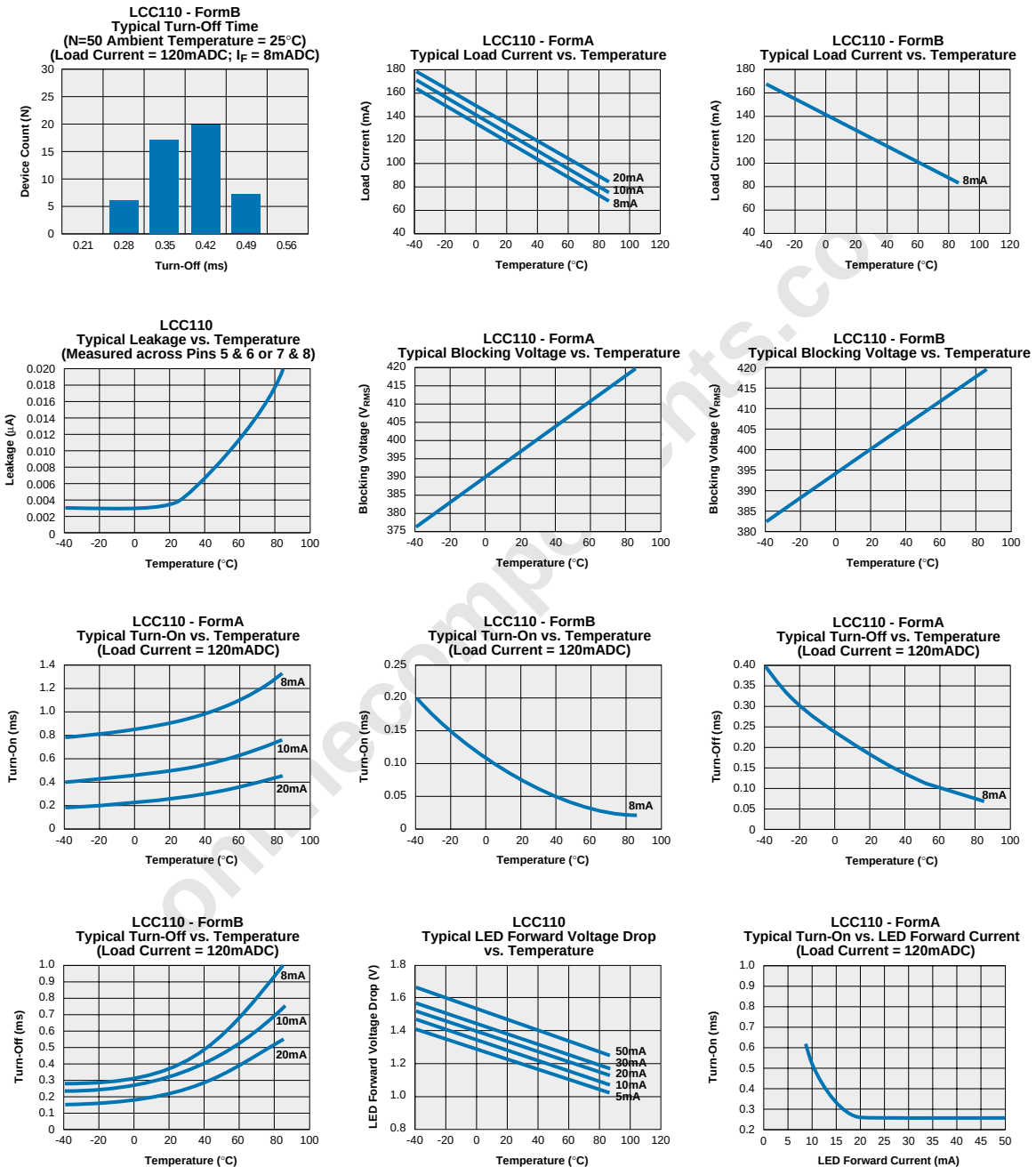
PERFORMANCE DATA



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