



1 Form A
Solid State Relay



DESCRIPTION

The AD6C211-L is a bi-directional, single-pole, single-throw, normally open (1 Form A) solid-state relay. It provides a load current of 150mA, high load voltage (400V) and current limiting circuitry in a compact 6 pin DIP package. Current limiting circuitry provides a level of protection against increased load currents or transient current spikes by active current reduction across the device, thereby protecting it and downstream components.

FEATURES

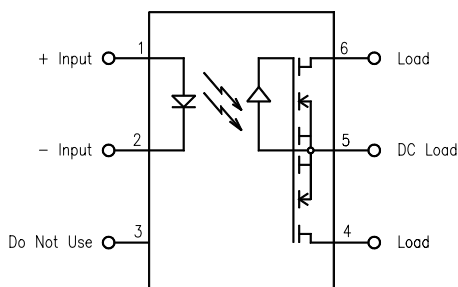
- Active current limiting protection
- Low input current (3mA TYP)
- 150mA maximum continuous load current
- 25 ohms maximum on-resistance
- High input-to-output isolation (3.75kV MIN)
- RoHS / Lead-Free / WEEE Compliant

OPTIONS/SUFFIXES*

- -S Surface Mount Leadform Option (50pcs/tube)
- -TR Tape and Reel Packing Option (1,000pcs/reel)

NOTE: Suffixes listed above are not included in marking on device for part number identification.

SCHEMATIC DIAGRAM



APPLICATIONS

- Multiplexers
- Meter reading systems
- Data Acquisition
- Medical equipment
- Battery monitoring
- Home/Safety security systems

ABSOLUTE MAXIMUM RATINGS*

PARAMETER	UNIT	MIN	TYP	MAX
Storage Temperature	°C	-55		125
Operating Temperature	°C	-55		85
Continuous Input Current	mA			50
Transient Input Current	mA			400
Reverse Input Control Voltage	V	6		
Output Power Dissipation	mW			800
Solder Temperature - Wave (10s)	°C			260
Solder Temperature - IR Reflow (10s)	°C			260

*The values indicated are absolute stress ratings. Functional operation of the device is not implied at these or any conditions in excess of those defined in electrical characteristics section of this document. Exposure to Absolute Ratings may cause permanent damage to the device and may adversely affect reliability.

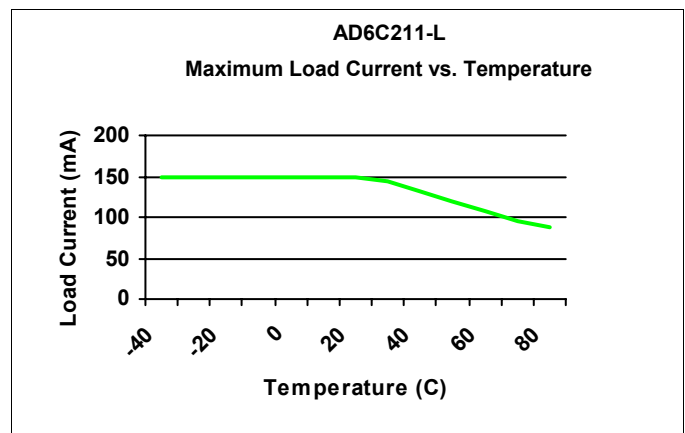
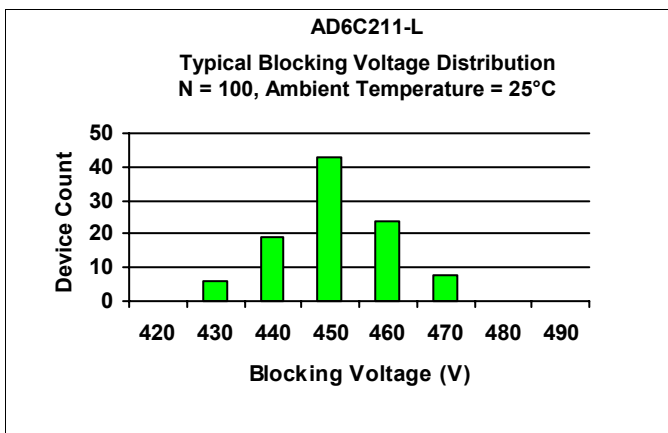
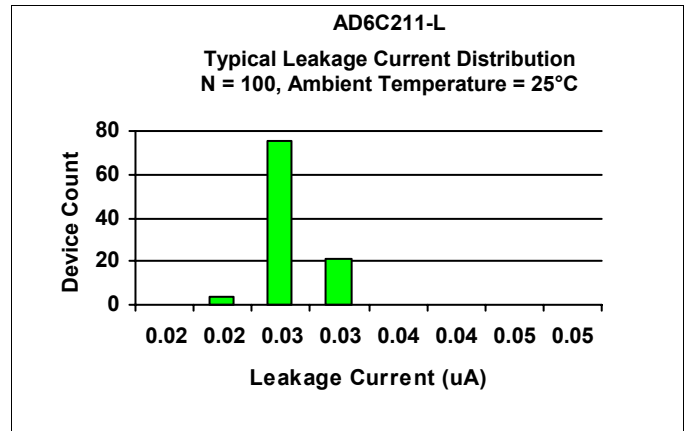
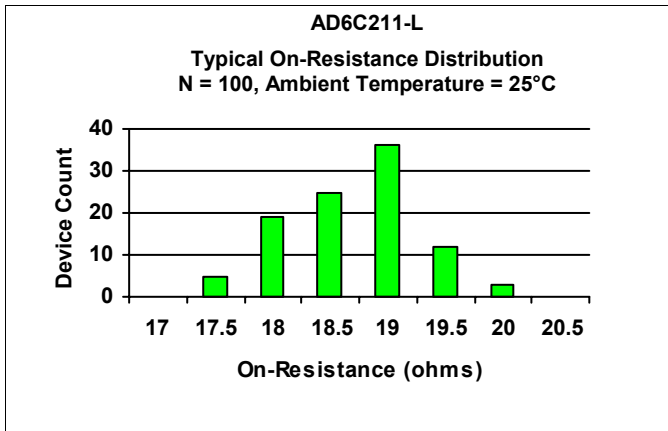
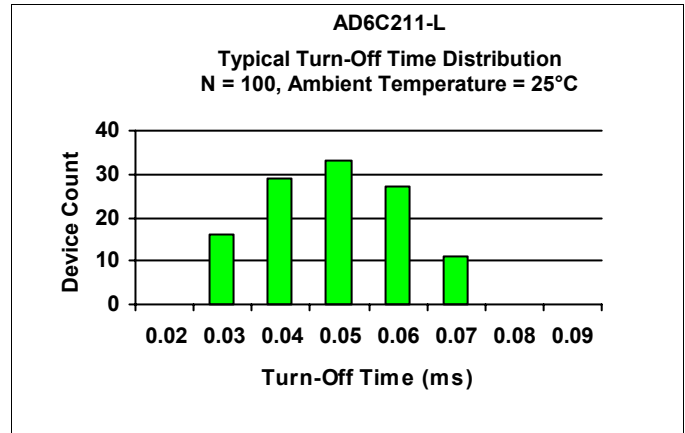
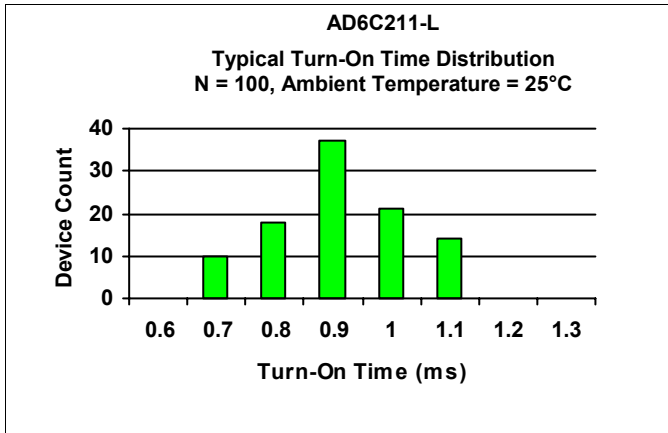
APPROVALS

- UL / C-UL Approved: File # E90096
- CSA Approved: Certificate #LR111581-1

ELECTRICAL CHARACTERISTICS - 25°C

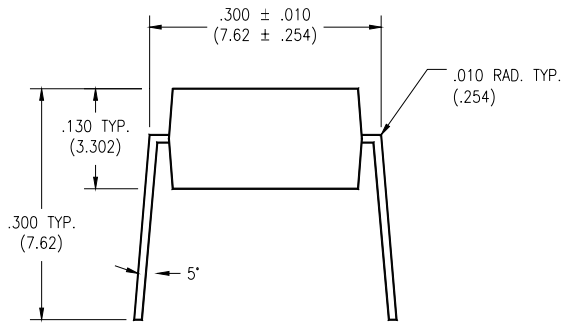
PARAMETER	UNIT	MIN	TYP	MAX	TEST CONDITIONS
INPUT SPECIFICATIONS					
LED Forward Voltage	V		1.2	1.5	If = 10mA
LED Reverse Voltage	V	6	12		Ir = 10uA
Turn-On Current	m A		2.5	5	Io = 150mA
Turn-Off Current	m A		0.5		
OUTPUT SPECIFICATIONS					
Continuous Load Current	m A			150	If = 5mA
Current Limit	m A	180	220	250	If = 5mA
On-Resistance	Ω		18	25	Io = 150mA
Leakage Current	μ A		0.2	1	Vo = 400V
Blocking Voltage	V	400			Io = 1uA
Output Capacitance	p F		25	50	Vo = 25V, f = 1.0MHz
Offset Voltage	m V			0.2	If = 5mA
COUPLED SPECIFICATIONS					
Isolation Voltage	V	3750			T = 1 minute
Turn-on Time	m s		1.5	5	If = 5mA, Io = 150mA
Turn-off Time	m s		0.5	1	If = 0mA, Io = 150mA
Isolation Resistance	G Ω	100			
Coupled Capacitance	p F		3		
Contact Transient Ratio	V / μ s	2000	7000		dV = 50V

PERFORMANCE DATA

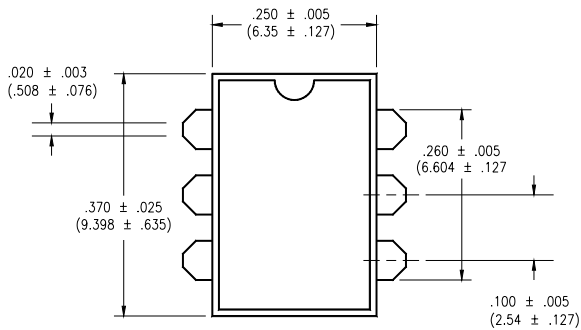


MECHANICAL DIMENSIONS

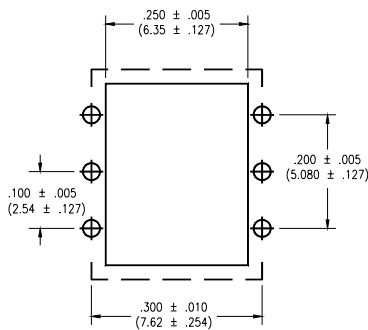
6 PIN DUAL IN-LINE PACKAGE



END VIEW

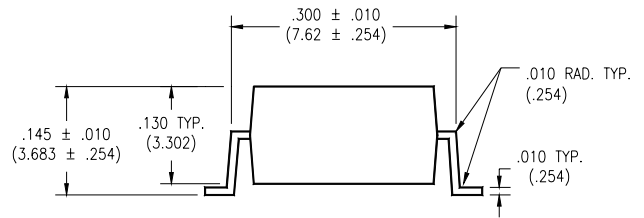


TOP VIEW

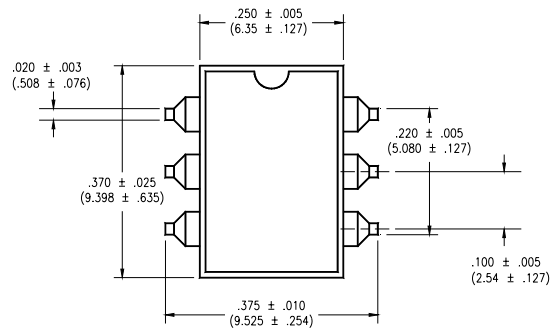


**BOTTOM VIEW/
BOARD PATTERN**

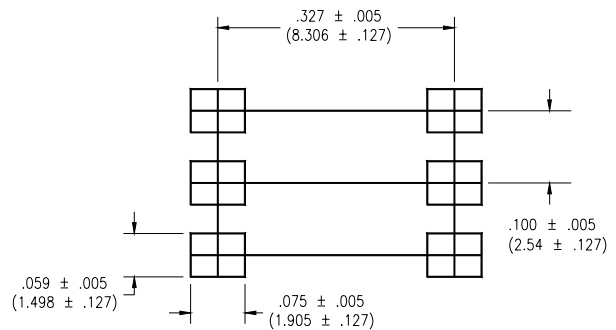
6 PIN SURFACE MOUNT DEVICE



END VIEW



TOP VIEW



**BOTTOM VIEW/
BOARD PATTERN**

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