



## DESCRIPTION

The AD4C332 is a bi-directional, double-pole, single-throw, normally closed multipurpose solid-state relay. It consists of two discrete solid state relays in a compact 8 pin package. Each relay is composed of a GaAlAs LED optically coupled to an IC--driving a pair of rugged source-to-source depletion type DMOS transistors.

## FEATURES

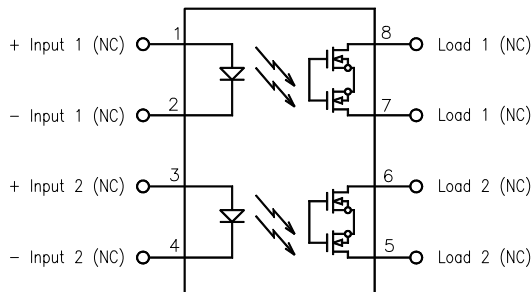
- Two discrete 1 Form B relays in 1 package
- Low On-Resistance (10 Ohms MAX)
- Low input control power consumption (2.5mA TYP)
- 200mA maximum continuous load current
- High input-to-output isolation
- Long life/high reliability

## OPTIONS/SUFFIXES\*

- -S Surface Mount Option
- -TR Tape and Reel Option

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

## SCHEMATIC DIAGRAM



## APPLICATIONS

- Reed relay replacement
- Meter reading systems
- Medical equipment
- Battery monitoring
- Multiplexers

## ABSOLUTE MAXIMUM RATINGS\*

PARAMETER	UNIT	MIN	TYP	MAX
Storage Temperature	°C	-55		125
Operating Temperature	°C	-40		85
Continuous Input Current	mA			40
Transient Input Current	mA			400
Reverse Input Control Voltage	V	6		
Output Power Dissipation	mW			800

\*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.

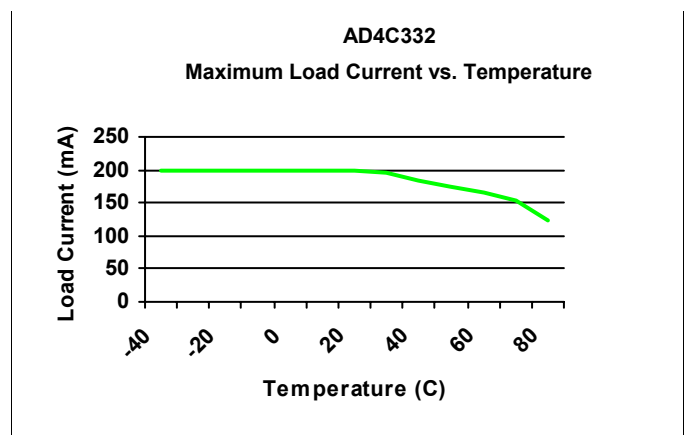
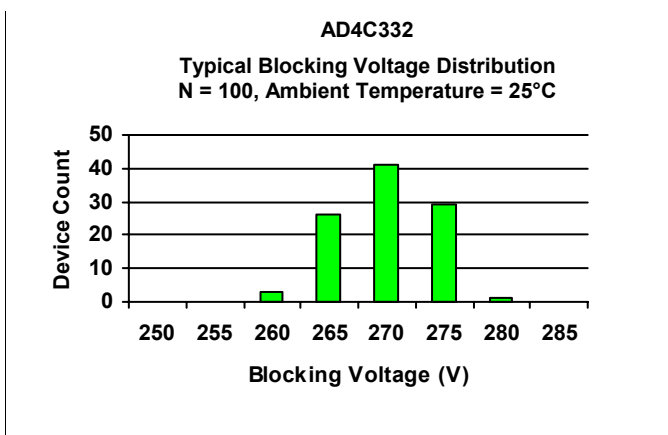
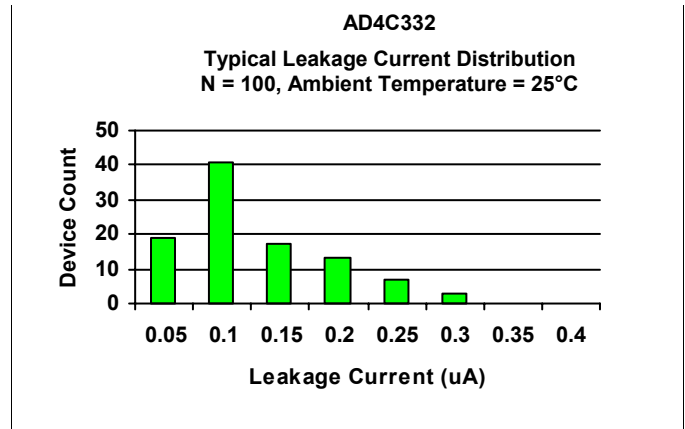
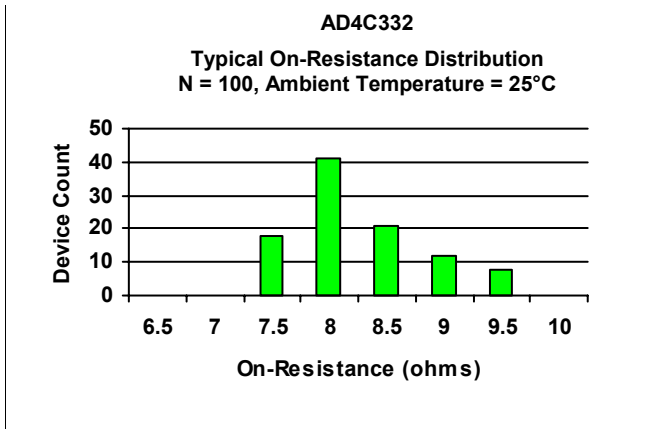
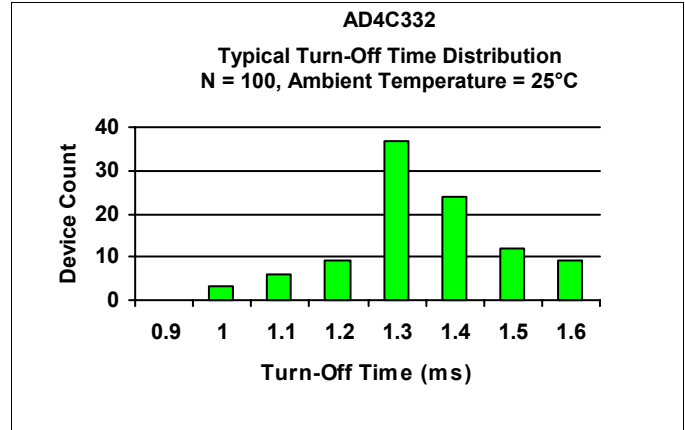
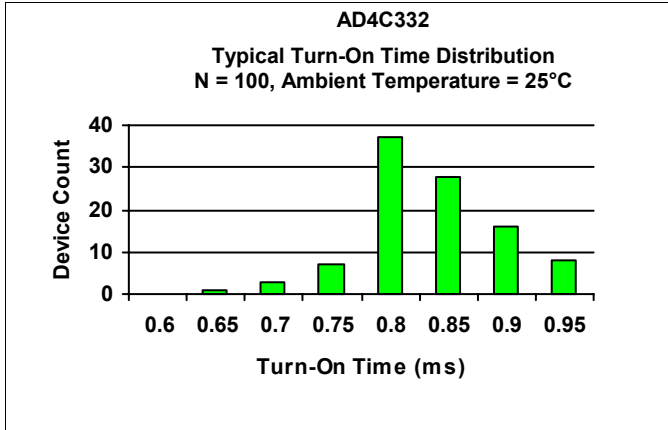
## APPROVALS

- BAPT CERTIFICATE #607836:  
BS EN 60950, BS EN 41003, BS EN 60065
- CSA CERTIFICATE #LR111581-1

**ELECTRICAL CHARACTERISTICS - 25°C**

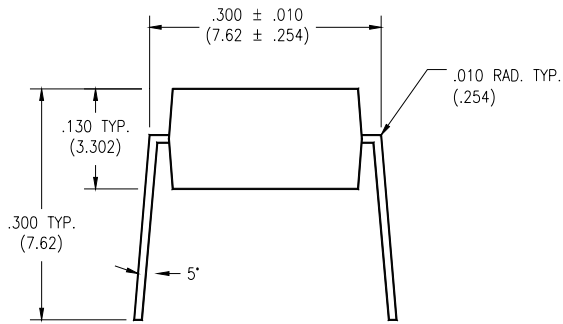
PARAMETER	UNIT	MIN	TYP	MAX	TEST CONDITIONS
<b>INPUT SPECIFICATIONS</b>					
LED Forward Voltage	V		1.2	1.5	If = 10mA
LED Reverse Voltage	V	6	12		Ir = 10uA
Turn-On Current	m A		0.5		Io = 200mA
Turn-Off Current	m A		2.5	5	
<b>OUTPUT SPECIFICATIONS</b>					
Blocking Voltage	V	250			Io = 1uA
Continuous Load Current	m A			200	If = 5mA
On-Resistance	Ω		8	10	Io = 200mA
Leakage Current	μ A		0.2	1	Vo = 250V
Output Capacitance	p F		25	50	Vo = 25V, f = 1.0MHz
Offset Voltage	m V			0.2	If = 0mA
<b>COUPLED SPECIFICATIONS</b>					
Isolation Voltage	V	2500			T = 1 minute
-H Suffix	V	3750			T = 1 minute
Turn-On Time	m s		0.8	2	If = 0mA, Io = 200mA
Turn-Off Time	m s		1	5	If = 5mA, Io = 200mA
Isolation Resistance	G Ω	100			
Coupled Capacitance	p F		2		
Contact Transient Ratio	V / μ s	2000	7000		dV = 50V

**PERFORMANCE DATA**



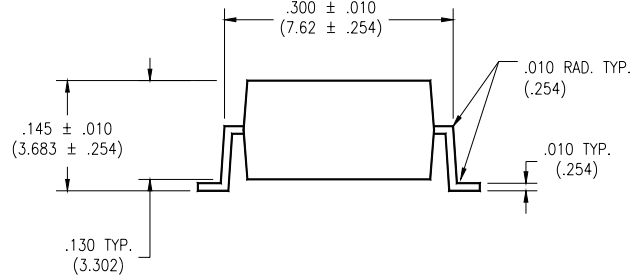
**MECHANICAL DIMENSIONS**

**8 PIN DUAL IN-LINE PACKAGE**

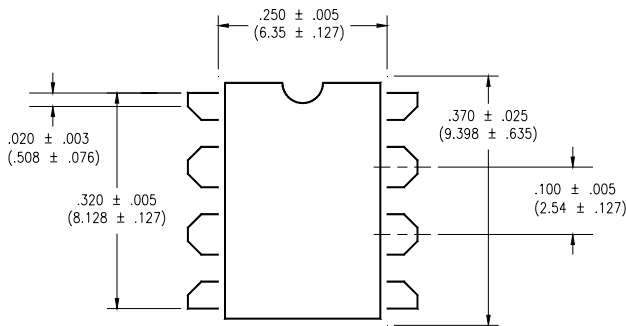


**END VIEW**

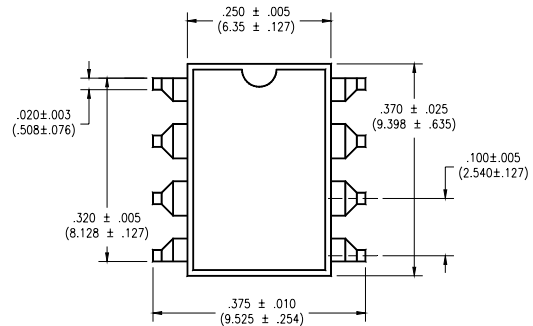
**8 PIN SURFACE MOUNT DEVICE**



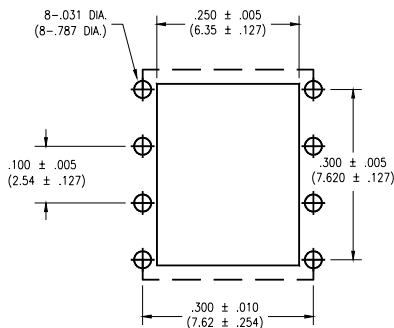
**END VIEW**



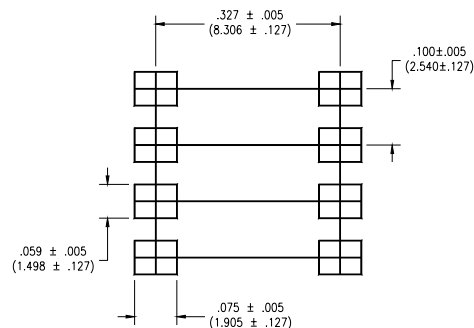
**TOP VIEW**



**TOP VIEW**



**BOTTOM VIEW/  
BOARD PATTERN**



**BOTTOM VIEW/  
BOARD PATTERN**

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