

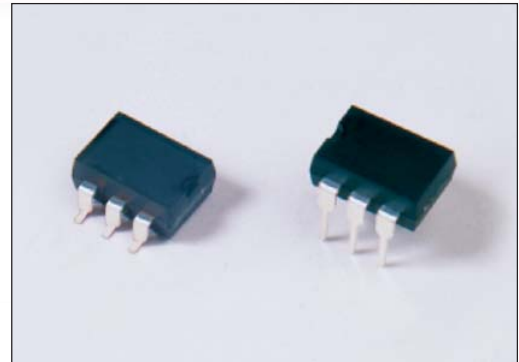
AD6-C111 PhotoMOS Relay

FEATURES

- DIP 6 Pins Package
- High Reliability
- High Input / Output Isolation
- Low On-State Resistance
- UL, CSA & BABT

Application

- Security Alarm System
- Telecom Switching
- Test and Measurement Equipment
- Medical Equipment
- Industrial Control

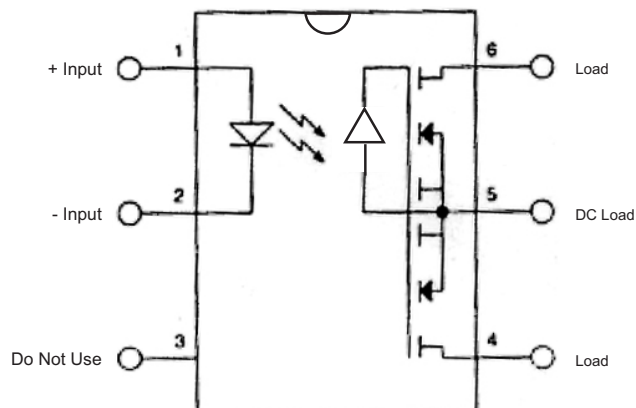


ORDERING INFORMATION

Part No.	Load	Contact Form	Voltage	Load Current	On Resistance	I/O Isolation Voltage	Package
AD6-C111	AC/DC	1 Form A	400V	120mA	25 Ω	Nil: 2500V H: 3750V	Nil: DIP S: SMD

Outline Dimension

Schematic



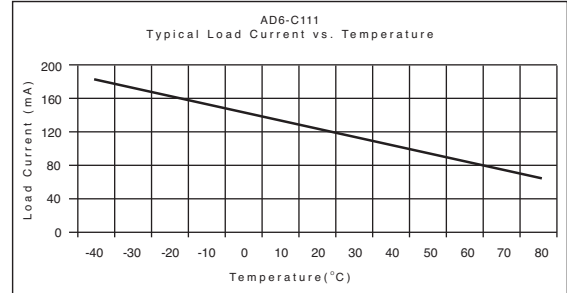
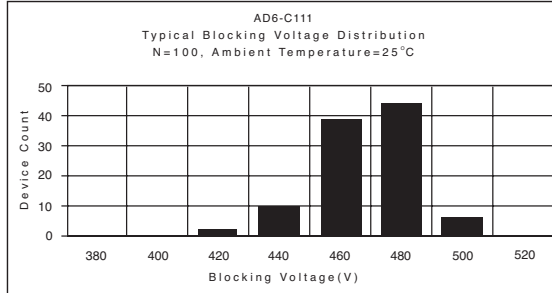
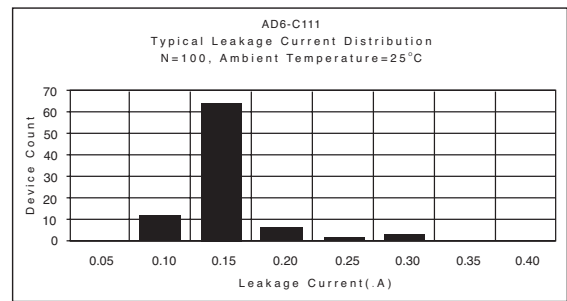
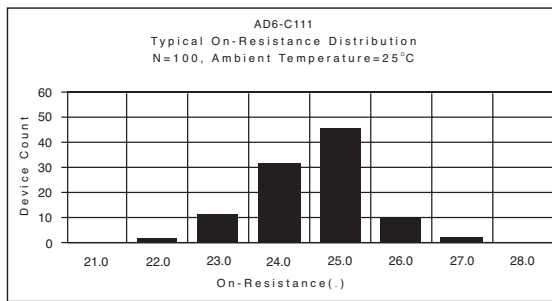
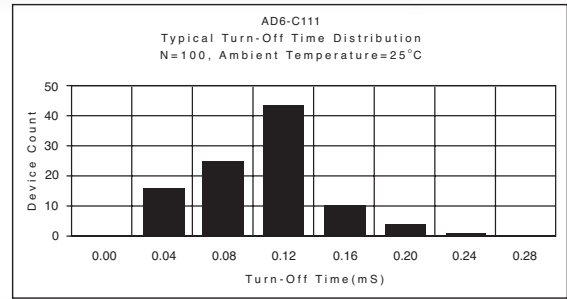
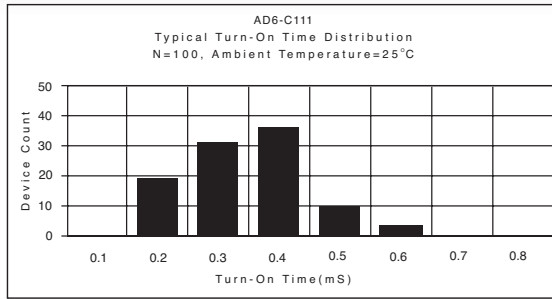
Absolute Maximum Ratings (Ambient Temperature:25°C)

Item		Symbol	AD6-C111	Units	Note
Input	LED Forward Current	I_F	50	mA	
	Peak Forward Current	I_{FP}	400	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V_R	6	V	
	Power Dissipation	P_{in}	75	mW	
Output	Load Voltage	V_L	400	V(AC peak or DC)	
	Continuous Load Current	I_L	120	mA	
	Peak Load Current	I_{Peak}	0.6	A	100ms (1 pulse)
	Power Dissipation	P_{out}	400	mW	
Total Power Dissipation		P_T	350	mW	
I/O Isolation Voltage		V_{iso}	1500	V _{rm}	RH=60%, 1min
Operating Temperature		T_{opr}	-40 to + 85	°C	
Storage Temperature		T_{stg}	-55 to +125	°C	
Pin Soldering Temperature		T_{sol}	260	°C	10 sec max.

Electrical Specifications (Ambient Temperature:25°C)

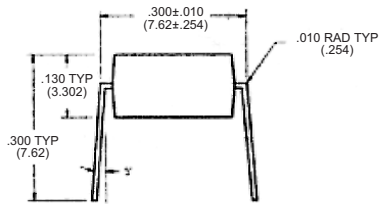
Item		Symbol		AD6-C111	Units	Conditions
Input	LED Dropout Voltage	V_F	TYP. MAX.	6.0 12	V	$I_F=10mA$
	LED Operate Current	$I_{F on}$	TYP. MAX.	2.5 5.0	mA	
	LED Turn Off Current	$I_{F off}$	TYP. MAX.	0.5 -	mA	
	LED Recovery Voltage	$V_{F off}$	MIN.	0.5	V	
Output	On-Resistance	R_{on}	TYP. MAX.	25 35	Ω	$I_F=5mA, I_L=100mA$, Time to flow is within 1 sec
	Off-State Leakage Current	I_{Leak}	MAX.	10	μA	$V_L=Rating$
	Output Capacitance	C_{out}	TYP.	110	pF	$V_L=0, f=1MHz$
Transmission	Turn-On Time	T_{on}	TYP. MAX.	4.5 7.0	ms	$I_F=5mA$ $I_L=100mA$
	Turn-Off Time	T_{off}	TYP. MAX.	0.5 0.8	ms	
Coupled	I/O Isolation Resistance	$R_{i/o}$	MIN.	10^{11}	Ω	DC500V
	I/O Capacitance	$C_{i/o}$	TYP. MAX.	- 2.4	pF	f=1MHz

REFERENCE DATA



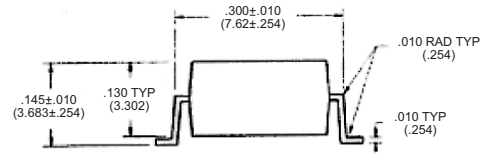
MECHANICAL DIMENSIONS

6 PIN DUAL IN-LINE PACKAGE

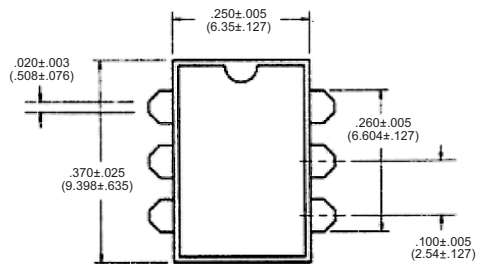


END VIEW

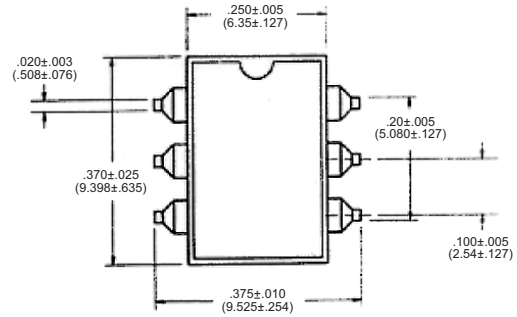
6 PIN SURFACE MOUNT DEVICE



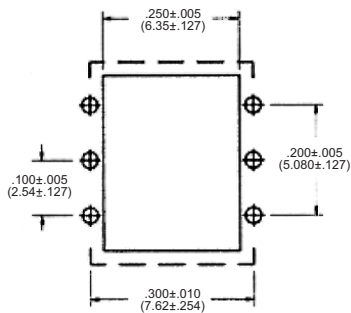
END VIEW



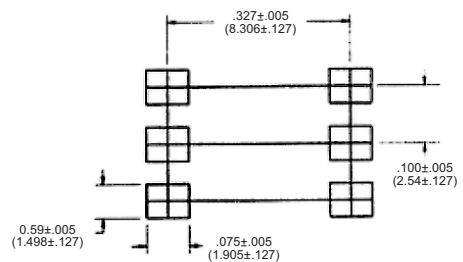
TOP VIEW



TOP VIEW



BOTTOM VIEW /
BOARD PATTERN



BOTTOM VIEW /
BOARD PATTERN