

## Electrical Specifications

### Operation Characteristics

#### Electrostatic Discharge (ESD) Safeguards

The AIR6A have a high sensibility to ESD (Electrostatic Discharge). We recommend to link your body and devices **permanently** to the ground during manipulation of the chip.

#### Absolute Maximum Ratings

Use permanently the component in range of absolute maximum rating may reduce the reliability of the device. We recommend to operate in typical values applications.



Parameter	Symbol	Min.	Typical	Max.	Unit	Conditions
OFF state voltage between contact terminals	$V_{clq}$			120	$V_{DC}$	
Voltage between contacts during switching operation				300	$mV_{DC}$	With no protection circuit
Power to be switched				7.5	$mW$	With no protection circuit
DC carry current	$I_{MAX}$		10	12	<b>A</b>	
Mechanical endurance		$3 \times 10^8$			<b>Cycles</b>	Tested at ambient temperature
Voltage GATE control	$V_G$		120		$V_{DC}$	
Storage Temperature Range	$T_{St}$	$-65^{\circ}C$		$125^{\circ}C$	$^{\circ}C$	
Temperature	$T_{Op}$	$-65^{\circ}C$		$125^{\circ}C$	$^{\circ}C$	

Table 1. Absolute Maximum Ratings

### Electrical Characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit	Conditions
<b>Contact on standby<sup>1</sup></b>			NO			
<b>On-State Contact Resistance</b>	$R_{ON}$		10	13	m $\Omega$	
<b>Off-State Contact Isolation</b>	$R_{OFF}$	60			M $\Omega$	
<b>Switching time</b>	$t_c$					
Turn-ON time			200	400	$\mu$ s	
Turn-OFF time			25	50	$\mu$ s	
<b>Volume</b>			10.6		mm <sup>3</sup>	

Table 2. DC and AC Electrical Specifications

Note :

1. The type of contact on standby NC or NO (Normally Open)

## Functional Block Diagram

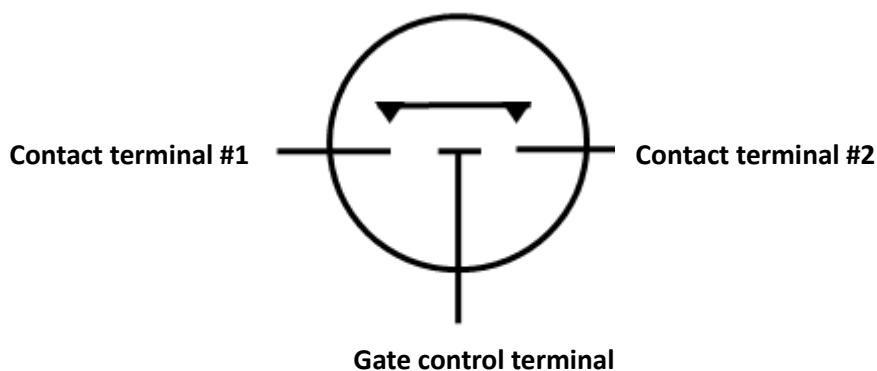


Figure 1. Functional Block Diagram

## Package Outline and pin description

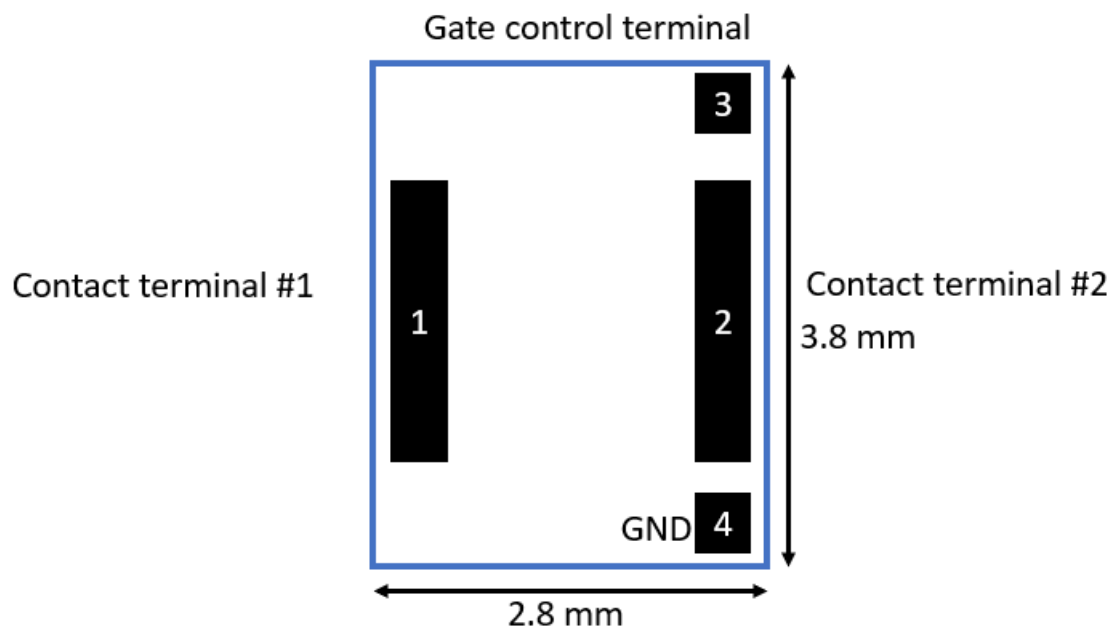


Figure 2. Size and Dimensions

Pin name	Pin#	Description
Contact terminal #1	1	Connect to the power line to be switched
Control terminal #2	2	Connect to the power line to be switched
Control terminal	3	Connect to the control voltage supply $V_G$
GND	4	Connect to common ground

Table 3. Pin informations