



Electrical Specifications

Operation Characteristics

Electrostatic Discharge (ESD) Safeguards

The AIR100P100 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}			90	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		A	Tested at ambient temperature with 5Ω Load
Mechanical endurance		1×10^8			Cycles	Tested at ambient temperature
Voltage GATE control	V_G	100	100	110	V_{DC}	
Storage Temperature Range	T_{St}	-65°C		125°C	°C	
Temperature	T_{Op}	-65°C		125°C	°C	

Table 1. Absolute Maximum Ratings



Electrical Characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit	Conditions
Contact on standby¹			NO			
On-State Contact Resistance	R_{ON}		10	15	$m\Omega$	
Off-State Contact Isolation	R_{OFF}	60			$M\Omega$	
Switching time	t_c					
Turn-ON time			200	400	μs	
Turn-OFF time			25	50	μs	
Volume			10.6		mm^3	

Table 2. DC and AC Electrical Specifications

Note :

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

Functional Block Diagram

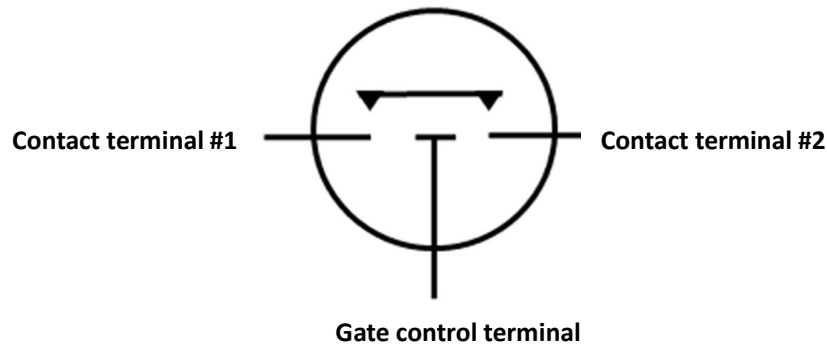


Figure 1. Functional Block Diagram



Package Outline and pin description

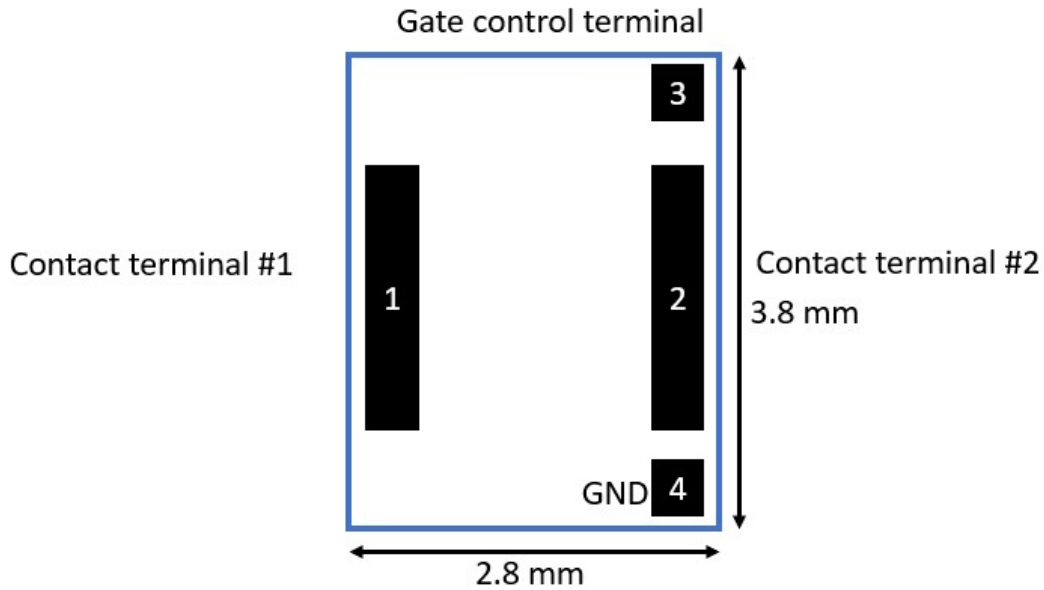


Figure 2. Size and Dimensions

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