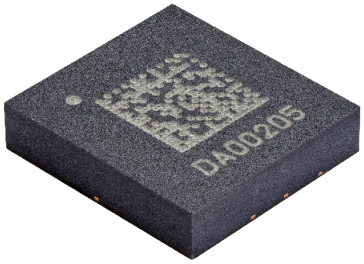
PRELIMINARY PRODUCT BRIEF

MM9200

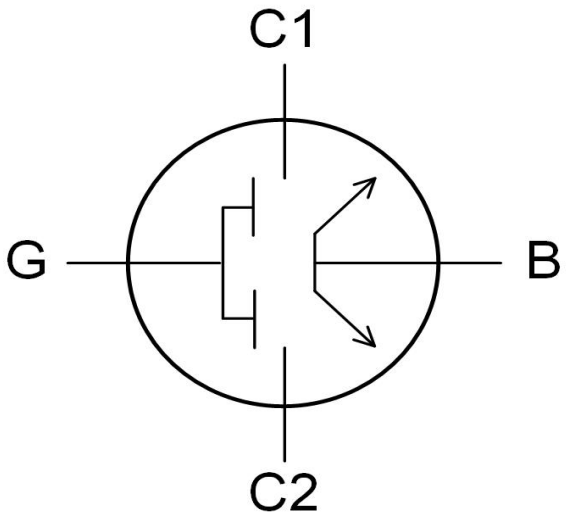
Power Switch



The MM9200 is a high-power SPST micro-electromechanical switch. The innovative Ideal Switch® technology enables highly reliable micro-electromechanical switches capable of carrying high voltage and high current in a small form factor.

The MM9200 provides ultralow on-state resistance, low leakage current and high voltage stand-off, with greater than 10 million switching cycles.

Because of its long lifetime, extremely low current consumption, and small form factor, the MM9200 is an ideal solution for replacing electromechanical relays, as well as solid-state switches such as IGBT and MOSFETs.



FEATURES

- Low 8 mΩ on-state resistance
- 300V voltage standoff (AC_{PK} or DC)
- 10A rated continuous current (AC_{RMS} or DC)
- 10µs fast switching time
- High mechanical endurance: 10 million operations
- QFN low-profile 6.5 mm x 6.0 mm Package

APPLICATIONS

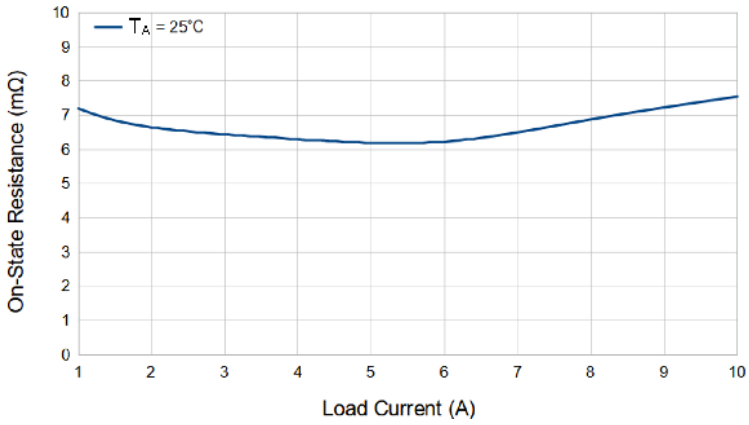
- LV industrial controls
- Solid state relay replacement
- Electromechanical relay replacement

MARKETS

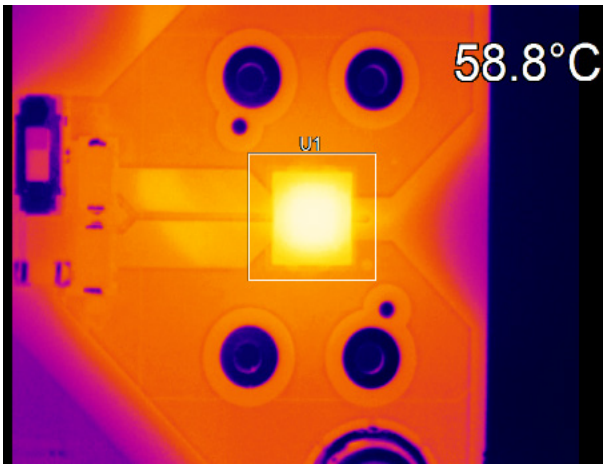
- Industrial automation
- Sustainable buildings
- Transport electrification
- Infrastructure modernization
- Test and measurement

ideal switch®

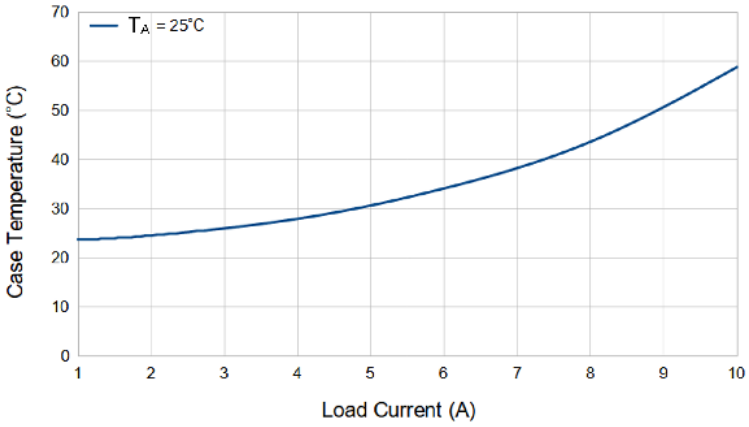
On-state Resistance vs Load Current



1P1S Configuration at 10 Amps with 7.6 mΩ



Case Temperature vs Load Current



DC and AC Electrical Specifications

Parameter	Min	Typ	Max	Unit
On-State Contact Resistance		8	10	mΩ
Off-State Contact Leakage Current		5		pA
Continuous Current			10	A (AC_{RMS}/DC)
Gate Bias Current		1	10	nA
Capacitance Off-State, INPUT to OUTPUT pin		3.4		pF
Switching Time On/Off		10		us
Mechanical Endurance		10M		Cycle
Standoff Voltage			300	VAC_{PK}/VDC

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