Features：

- Operating voltage: 5.0V
- I/O-Isolation 3000 VDC
- Baud rate：1Mbps(MAX)
- Compatible with ISO11898 standard
- No External Components Required
- ESD Protection （Contact model：±4KV）
- No power on, bus without electricity
- Operating temperature：-40℃ ～+85℃

DESCRIPTION

RCM1051(A) is the differential level high speed transceiver which integrates with DC and DC3000 isolation, which makes the controller output high low logic level programming of CAN bus,meeting the standard of ISO11898. Using RCM1051(A) transceiver in Can-bus system, which builds the completely isolated interface between the Can-bus controller and the physical layer bus, and to improve the ability of anti common mode interference. The Can-bus outlet end for this product is with TVS tube, which increases the chip prohibit the bus from overvoltage capability

Model Selection Guide

Order Code	Input Voltage		Baud rate(Mbps)	Bus Over Voltage Protection	Input reverse connect protection
	Vin(VDC)	Range(VDC)			
RCM1051	5	4.75-5.25	1	No	Yes
RCM1051A	3 .3	3 .0-3.6	1	Yes	Yes

Parameter

Item	Specification	Min	Typ	Max	Units
Input Voltage		4.5	5.0	5.5	VDC
		3 .0	3 .3	3 .6	VDC
Operating Temperature		-40		+85	℃
Storage Temperature		-55		+125	℃
Isolation voltage			3000		VDC
Isolation capacitance			40		pF
Humidity	No frosting	10		95	%
Quiescent Current			32		mA
Device Amounts		110			Point
Propagation delay time		50		150	μS
TXD/RXD pin current				3	mA
Bus voltage		-55		+55	V

Receiver Function

$V_{CANH-CANL}$(VDC)	Bus state	Output(RXD)
≥0.9	Dominant	0
≤0.5	Recessive	1

Driver Function

Input(TXD)	Bus state	CANH	CANL
0	Dominant	1	0
1	Recessive	0.5Vin	0.5Vin

Application

Application Area

- Industrial automation system
- Automatic control on electrical power system
- Cartronics
- Communication
- Mining
- Instrument and meter
- Medical equipment

Typical Circuit

Mechanical Dimension

Units：mm （inch）
Tolerances：±0.25mm （±0.01inch）

Pin Connections

Pin	Function	Description
1	+Vin	positive pole
2	GND	negative pole
3	TXD	Driver input date
4	RXD	Receiver output data
6	CANH	High electrical level
7	CANL	Low electrical level
8	CAN-GND	CAN Bus Isolated Ground