Features：

- Double isolation RS232
- Operating voltage: 3.3V/5.0V
- I/O-Isolation 2500 VDC
- Baud rate：115.2Kbps
- Instantaneous bus over voltage protection
- Compatible with EIA/TIA-232-F standard
- No External Components Required
- Low EMI
- High electromagnetic anti-interference
- Operating temperature：-40℃ ～+85℃

DESCRIPTION

RSM232D is the double transceiver which integrates with the power isolation and electrical isolation. It realizes with isolated RS-232 separation circuit, the isolation voltage is up to 2500VDC.It improves bus reliability and common mode noise immunity. It is built-in TVS tube, which increases the chip prohibit the bus from overvoltage capability, The minimum transmission rate of data transmission is 12.Kbps. The product design meets the standard of EIA/TIA-232-F, and with ESD (in HBM mode) up to +15KV the protection ability. It is small and high integration, no need peripheral circuit, easy to use.

Model Selection Guide

Order Code	Input Voltage		Baud rate(Kbps)	Speciality	Package
	Vin(VDC)	Range(VDC)			
RSM232D	5	3.0-5.5	1024	Double RS232	DIP12

Parameter

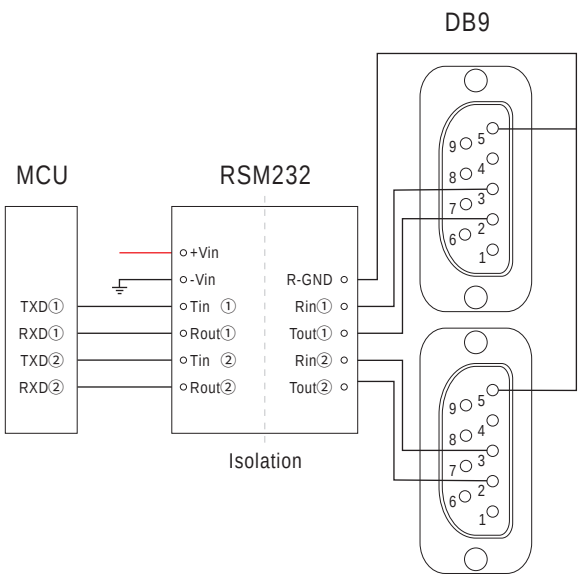
Item	Specification	Min	Typ	Max	Units
Input Voltage		3.0	5.0	5.5	VDC
Operating Temperature		-40		+85	℃
Storage Temperature		-55		+125	℃
Isolation voltage			2500		VDC
Isolation capacitance			40		pF
Humidity	No frosting	10		95	%
Quiescent Current				33	mA
Propagation delay time		350		400	μS
TXD/RXD pin current				3	mA
Receiver input voltage		-15		+15	V
Transceiver output voltage range		-5		+5	V
Transceiver short-circuit current				70	mA
ESD Protection	Contact model			±4000	V
	Machine model			±200	V

Application

Application Area

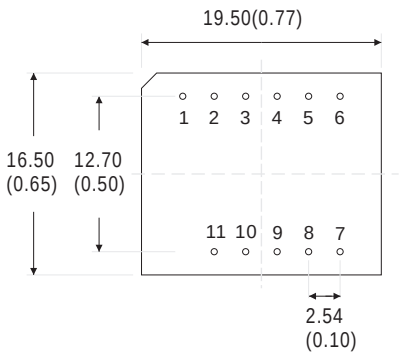
- Industrial automation system
- Automatic control on electrical power system
- Cartronics
- Communication
- Access control system & Monitor
- PLC controller

Typical Circuit

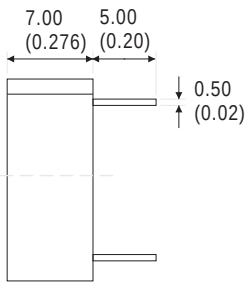


Mechanical Dimension

Bottom View



Lateral View



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

Pin Connections

Pin	Function	Description
1	+Vin	positive pole
2	GND	negative pole
3	Tin1	(1) TTL/CMOS transmitter input
4	Rout1	(1) TTL/CMOS receiver output
5	Tin2	(2) TTL/CMOS transmitter input
6	Rout2	(2) TTL/CMOS receiver output
7	Rin2	(2) Rs232 receiver input
8	Tout2	(2) Rs232 transmitter output
9	Rin1	(1) Rs232 receiver input
10	Tout1	(1)RS232 transmitter output
11	R-GND	Rs232 power isolated ground