

**Features :**

- Transceiver with AutoDirection Control
- Operating voltage: 3.3V / 5.0V
- I/O-Isolation 3000 VDC
- Baud rate : 9600bps(MAX)
- Bus protection
- Quiescent Current: 38mA(Typ)
- No External Components Required
- ESD Protection ( Contact : ±4KV ; Air : ±8KV )
- Operating temperature : -40 ~ +85



**Description**

RE485 series is the fully isolation and half duplex transceiver, which integrates with the power isolation, electrical isolation, the RS-485 interface chip and the bus protection function. It is suitable for the data transmission for bidirectional data communication or multi node bus. The maximum transmission data rate is up to 9600bps. It is built-in isolated DC/DC inverter, with the isolation voltage up to 3KVDC, It is small, no need peripheral circuit, convenient to embed the user equipment. The bus is with the ESD protection function, meets the standard of IEC61000-4-2.

**Model Selection Guide**

Order Code	Input Voltage		Baud rate(bps)	Package
	Vin(VDC)	Range(VDC)		
RE3485T	3.3	3.17-3.45	9600	DIP10
RE485T	5	4.75-5.25		DIP10

**Parameter**

Item	Specification	Min	Typ	Max	Units
Input Voltage		4.75	5.0	5.25	VDC
		3.17	3.3	3.45	VDC
Operating Temperature		-40		+85	
Storage Temperature		-55		+125	
Isolation voltage			3000		VDC
Isolation capacitance			40		pF
Humidity		10		95	%
Quiescent Current			35		mA
Device Amounts			32		Point
Propagation delay time		50		100	μS
CON pin current				6	mA
ESD Protection	Contact			±4	KV
	Air			±8	KV

**Receiver Function**

Input(V <sub>A-B</sub> )	Output(RXD)
V <sub>A-B</sub> +0.2VDC	1
V <sub>A-B</sub> -0.2VDC	0

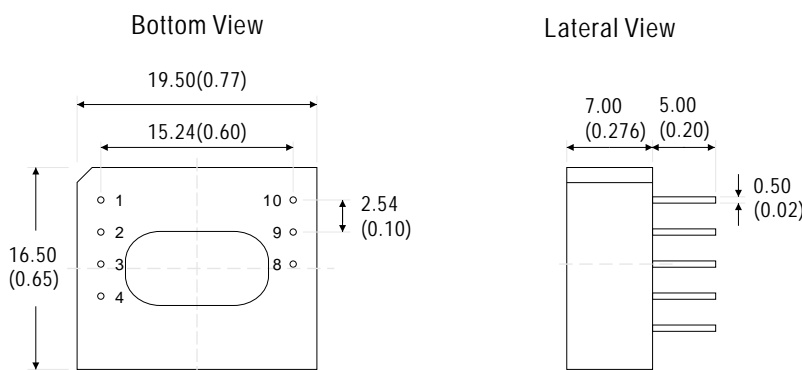
**Driver Function**

Input(TXD)	Output(A)	Output(B)
1	1	0
0	0	1

**Application**

Application Area	Typical Circuit
<ul style="list-style-type: none"> <li>→ Industry control</li> <li>→ Automatic control on electrical power system</li> <li>→ Building Control Systems</li> <li>→ Communication</li> <li>→ Programmable Logic Controller</li> <li>→ Mining</li> </ul>	

**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 data
4	RXD	Receiver output data
8	B	RS485 B pin
9	A	RS485 A pin
10	RGND	RS485 Bus Isolated Ground