

RS-485 Transceiver Half-Duplex

	THVD1500 THVD1520	THVD1510 THVD1550	THVD1400 THVD1420	THVD1400V	THVD1410 THVD1450	THVD1419 THVD1429	THVD1439/V THVD1449/V	THVD2410 THVD2450	THVD2410V THVD2450V	THVD1424* THVD1454	THVD8010 THVD8000
Feature	IEC ESD + IEC EFT	High IEC ESD + IEC EFT	IEC ESD + IEC EFT + SOT package	IEC ESD / EFT + 1.8V IO + selectable rate	High IEC ESD + IEC EFT	IEC Surge + ESD + EFT	4kV IEC Surge + 1.8V IO (V)	High bus fault + Wide common mode range	High bus fault + 1.8V IO + selectable rate	120Ohm termination	RS-485 over power line, OOK
Supply Voltage	5V	5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V	3.3V to 5V
Flexible IO				1.65V to 5.5V			1.65V to 5.5V (1439V/1449V)		1.65V to 5.5V		
Maximum data rate	1500: 0.5 Mbps 1520: 10 Mbps	1510: 0.5 Mbps 1550: 50Mbps	1400: 0.5 Mbps 1420: 12 Mbps	500Kbps, 20Mbps	1410: 0.5 Mbps 1450: 50Mbps	1419: 0.25Mbps 1429: 20 Mbps	1439(V):0.25Mbps 1449(V): 12 Mbps	2410: 0.5 Mbps 2450: 50Mbps	2410V:250K, 1Mbps 2450V:20, 50Mbps	500Kbps, 20Mbps	OOK max freq. 8010: 300KHz 8000: 5MHz
Extended bus fault protection	-18V to 18V	-18V to 18V	-16V to 16V	-16V to 16V	-18V to 18V	-15V to 15V	-15V to 15V	-70V to 70V	-70V to 70V	-15V to 15V	-18V to 18V
Extended common mode range	-7V to 12V	-15V to 15V	-7V to 12V	-7V to 12V	-15V to 15V	-12V to 12V	-12V to 12V	-25V to 25V	-25V to 25V	-7V to 12V	-7V to 12V
Integrated IEC 61000-4-2 ESD protection	8kV	18kV	12kV	12kV	18kV	8kV	15kV	12kV	12kV	8kV	8kV
Integrated IEC 61000-4-4 EFT protection	1500: 2kV 1520: 4kV	4kV	4kV	4kV	4kV	4kV	4kV	4kV	4kV	4kV	4kV
Integrated IEC 61000-4-5 Surge protection						2.5kV	4kV				
HBM ESD	16kV	30kV	16kV	16kV	30kV	16kV	16kV	16kV	16kV	16kV	16kV
Package, Temperature	SOIC-8 (5x4mm) -40 to 125C	SOIC-8 (5x4mm) VSSOP-8 (3x3mm) -40 to 125C	SOIC-8 (5x4mm) SOT-8 (2.1x1.2mm) -40 to 125C	VSON-10 (3x3mm) -40 to 125C	SOIC-8 (5x4mm) VSSOP-8 (3x3mm) VSON-8,1450 (3x3mm) -40 to 125C	SOIC-8 (5x4mm) -40 to 125C	SOIC-8 (5x4mm) -40 to 125C	SOIC-8 (5x4mm) VSSOP-8, VSON-8 (3x3mm) -40 to 125C	VSON-10 (3x3mm) -40 to 125C	VSON-10 (3x3mm) -40 to 125C	SOT-8 (2.9x1.6mm) -40 to 125C

RS-485 Transceiver Full-Duplex

	<u>THVD1512</u>	<u>THVD1551</u> <u>THVD1552</u>	<u>SN65HVD1470</u> <u>SN65HVD1471</u>	<u>SN65HVD1473</u> <u>SN65HVD1474</u>	<u>THVD1451</u> <u>THVD1452</u>	<u>THVD2412V</u> <u>THVD2452V</u>	<u>THVD1424*</u>
Feature	High IEC ESD + IEC EFT	High IEC ESD + IEC EFT	High IEC ESD + IEC EFT	High IEC ESD + IEC EFT	High IEC ESD + IEC EFT	High bus fault + 1.8V IO + selectable rate	HD/FD switchable + 120Ohm
Supply Voltage	5V	5V	3.3V	3.3V	3.3V to 5V	3.3V to 5V	3.3V to 5V
Flexible IO						1.65V to 5.5V	1.65V to 5.5V
Maximum data rate	0.5 Mbps	50 Mbps	0.4 Mbps	20 Mbps	50 Mbps	2412V:115K, 0.5Mbps 2452V:20, 50Mbps	500Kbps, 20Mbps
Extended bus fault protection	-18V to 18V	-18V to 18V	-13V to 16.5V	-13V to 16.5V	-18V to 18V	-70V to 70V	-15V to 15V
Extended common mode range	-15V to 15V	-15V to 15V	-7V to 12V	-7V to 12V	-15V to 15V	-25V to 25V	-7V to 12V
Integrated IEC 61000-4-2 ESD protection	18kV	18kV	16kV	16kV	18kV	12kV	8kV
Integrated IEC 61000-4-4 EFT protection	4kV	4kV	4kV	4kV	4kV	4kV	4kV
HBM ESD	30kV	30kV	30kV	30kV	30kV	16kV	16kV
Package, Temperature	VSSOP-10 (3x3mm) -40 to 125C	51: VSSOP-8 (3x3mm) 52: VSSOP-10 (3x3mm), SOIC-14 (8.6x4mm) -40 to 125C	70: MSOP-10 (3x3mm), SOIC-14 (8.6x4mm) 71: MSOP-8 (3x3mm), SOIC-8 (5x4mm) -40 to 125C	73: MSOP-10 (3x3mm), SOIC-14 (8.6x4mm) 74: MSOP-8 (3x3mm), SOIC-8 (5x4mm) -40 to 125C	51: VSON-8 (3x3mm), SOIC-8 (5x4mm) 52: VSSOP-10 (3x3mm), SOIC-14 (8.6x4mm) -40 to 125C	SOIC-14 (8.6x4mm) -40 to 125C 1Q'24 release	VQFN-16 (3x3mm) -40 to 125C *: Full / Half Duplex