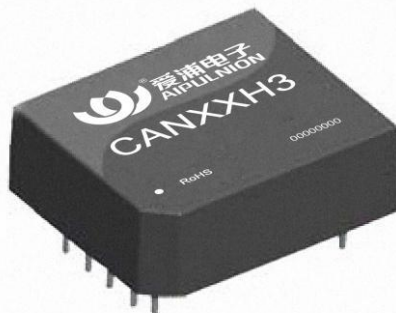


Single High Rate H Type
 CAN Isolation Transceiver Module
 (Enhanced Version)

CAN3V3H3 (3.3V)

CAN05H3 (5.0V)



RoHS

Product Feature

- ⌘ Two-terminal isolation between input and output
- ⌘ Integrated Isolated DC/DC converter
- ⌘ Isolation voltage:2500VDC
- ⌘ Operating temperature range:--40℃~+105℃
- ⌘ High speed data rate: 1Mbps
- ⌘ Complies with ISO 11898 standard
- ⌘ An unpowered node does not disturb the bus lines
- ⌘ Connect up to 110 nodes on one bus
- ⌘ Low electromagnetic radiation
- ⌘ High electromagnetic resistance
- ⌘ ESD protection(human discharge module±4KV),complete EMC recommended circuit

Product Description

Single High Rate H Type CAN isolation transceiver CAN3V3H3 / CAN05H3 series are CAN bus transceiver module with integrated power isolation power, signal isolation chip and CAN transceiver chip. The main function is to convert logic level to CAN bus different level, to achieve signal isolation. The product is with constant-voltage source isolation power. It can achieve 2500VDC electrical isolation and high ESD protection function. Products can easily embedded in the user equipment, so that equipment can easily achieve CAN bus network connectivity.

Product List

Part no	Power Input
CAN3V3H3	3.0V~3.6V
CAN05H3	4.5V~5.5V

Electrical Character

Power Input Specification	Static Current	CAN3V3H3≤40mA CAN05H3≤30mA
	Power Consumption	<0.5W
Input Specification	Serial Interface	Compatible with the CAN control port of +5V and +3.3V
	Pin Current	I _{TXD} ≤2mA; I _{RXD} ≤2mA
Output Specification	CAN Bus Interface	Meet ISO-11898 standard,twisted-pair output
	Bus Pin Maximum DC Voltage	-58V~+58V
	Bus Protection	Over-voltage bus protected, thermally protected and high voltage transient protected

Transmission Specifications

Transmission rate	1Mbps(Max.)
Number of Nodes	110 nodes (Mini.)

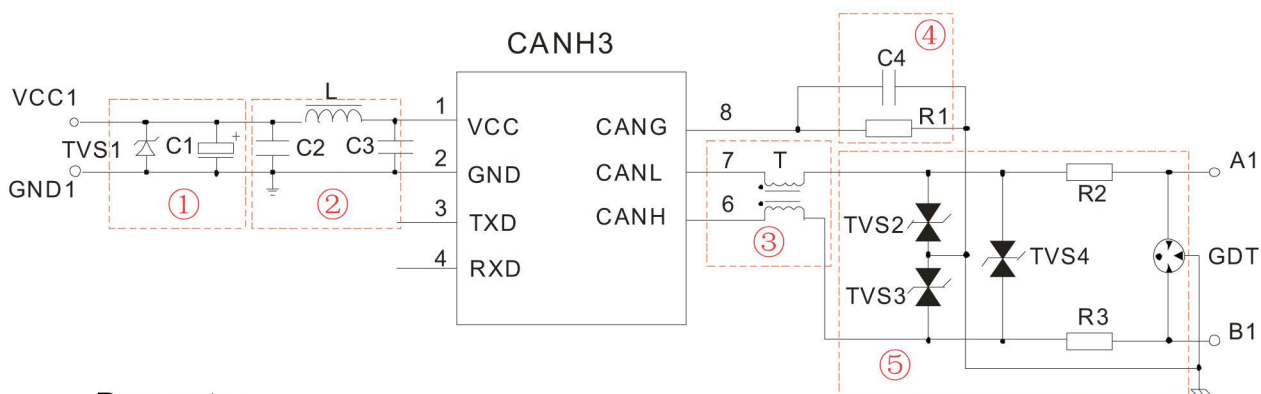
Isolation Specification

Electrical isolation	Two-terminal isolation(Input-output are mutually isolation)
Isolation Voltage	2500VDC (Testing for 1 minute, leakage current <1mA, humidity<95%)

EMC Specifications					
EMI	CE	CISPR22/EN55022	CLASS A		(See recommended Photo 1-②)
	RE	CISPR22/EN55022	CLASS A		(See recommended Photo 1-③)
EMS	ESD	IEC/EN61000-4-2	Contact ±4KV	perf. Criteria B	(See recommended Photo 1-④)
	RS	IEC/EN61000-4-3	10V/m	perf. Criteria A	
	EFT	IEC/EN61000-4-4	Power port±2KV	perf. Criteria B	(See recommended Photo 1-①)
		IEC/EN61000-4-4	Single port±2KV	perf. Criteria B	(See recommended Photo 1-⑤)
EMS	Surge	IEC/EN61000-4-5	Power port±2KV	perf. Criteria B	(See recommended Photo 1-①)
		IEC/EN61000-4-5	Single port±2KV	perf. Criteria B	(See recommended Photo 1-⑤)
	CS	IEC/EN61000-4-6	3 Vr.m.s	perf. Criteria A	

General Specifications	
Environment Temperature	Operating Temperature: -40℃~+105℃
	Transport Storage Temperature: -55℃~+125℃
Operating Humidity	10%~90%
Max. Operating Temperature for Casing	50℃(Ta=25℃)
Cooling Method	Natural cooling
Dimensions	19.9*16.9*7.0 (Unit: mm)
Weight	4.00g(Typ.)
Application Environment	The presence of dust, fierce vibration, impulsion and corrosive gas may cause damage to product.

EMC Recommended Circuit



Parameter:

Component	CAN3V3H3	CAN05H3
C1	220uF/10V(Electrolytic Capacitor)	
TVS1	SMCJ5.0A	SMCJ6.5A
C2、C3	1uF/50V	
L	10μH	
T	B82793S0513N201	
C4	1nF/2KV	
R1	1MΩ	
TVS2、TVS3	SMBJ24CA	
TVS4	SMBJ6.5CA	
R2、R3	10Ω/2W(Wire Wound Resistance)	
GDT	B3D150L-C	

Application Precautions

1. Please read the instructions carefully before use; contact our technical support if you have any problem;
2. Do not use the product in hazardous areas;
3. Do not dismount and assemble the product without permission to avoid failure or malfunction of equipment;

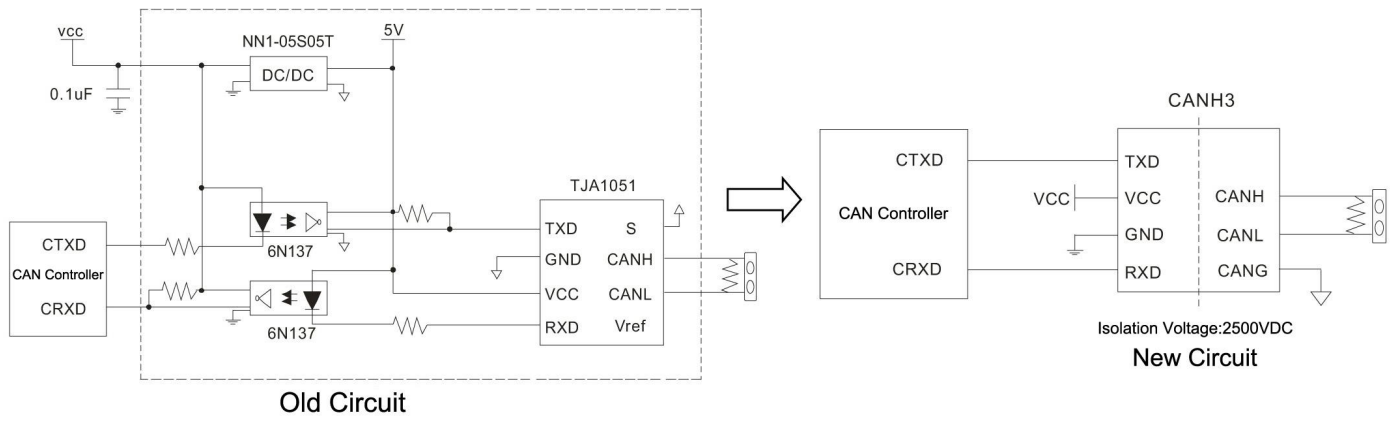
After-sales service

- 1. Ex-factory inspection and quality control have been strictly conducted for the product; if there occurs abnormal operation or possibility of failure of internal module, please contact the local representative or our technical support;
- 2. The warranty period for the product is 3 years as calculated from the date of delivery. If any quality problem occurs under normal use within the warranty period, the product can be repaired or changed for free.

Applied Circuit

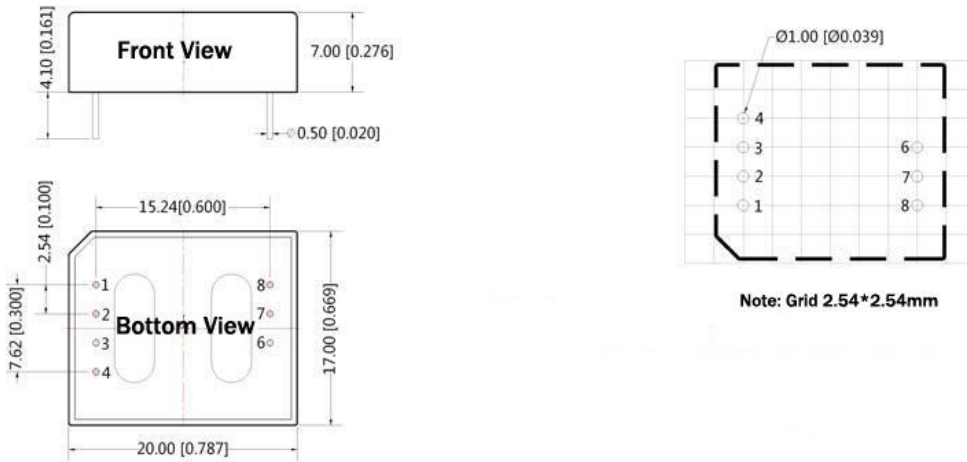
Refer to the CAN Industrial Bus Interface Isolating Module Application Manual.

Product Application Circuit



Product Dimension and Pin Specification

Outer Dimension



Pin-out		
Pin	Designation	Function
1	VCC	Input Power+
2	GND	GND
3	TXD	TD-DCAN Send Pin
4	RXD	TD-DCAN Receiving Pin
6	CANH	TD-DCAN H Pin
7	CANL	TD-DCAN L Pin
8	CANG	Isolation Power Output CANG

Note:

Unit: mm[inch]

Pin section tolerance: ± 0.10 [± 0.004]

General tolerances: ± 0.25 [± 0.010]

THIRD ANGLE PROJECTION

Note:

1. Unless otherwise specified, parameters in this datasheet were measured under the conditions of $T_a=25^\circ\text{C}$, humidity < 75% with nominal input voltage and rated output load (pure resistance load);
2. All index testing methods in this datasheet are based on our Company's corporate standards;
3. The performance indexes of the product models listed in this manual are as above, but some indexes of non-standard model products will exceed the above-mentioned requirements, please directly contact our technician for specific information;
4. We can provide product customization service,
5. Specifications are subject to change without prior notice, please follow up with our website for newest manual.

Guangzhou Aipu Electron Technology Co., Ltd

Add: Building B, No.4 Courtyard, Qixing Gang, Shiliu Gang road, Haizhu Dis, GZ, CN

Tel: 400-811-8032

Fax: 020-84206762

E-mail: market@aipu-elec.com

Website: [Http://www.aipulnion.com](http://www.aipulnion.com)