

LAN Components

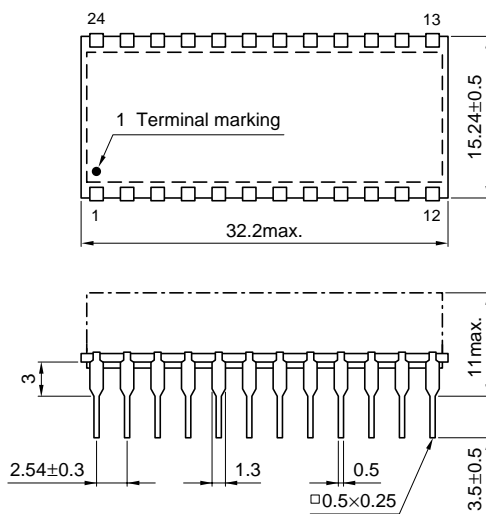
Interface DIP

HIM Series HIM-7000

FEATURES

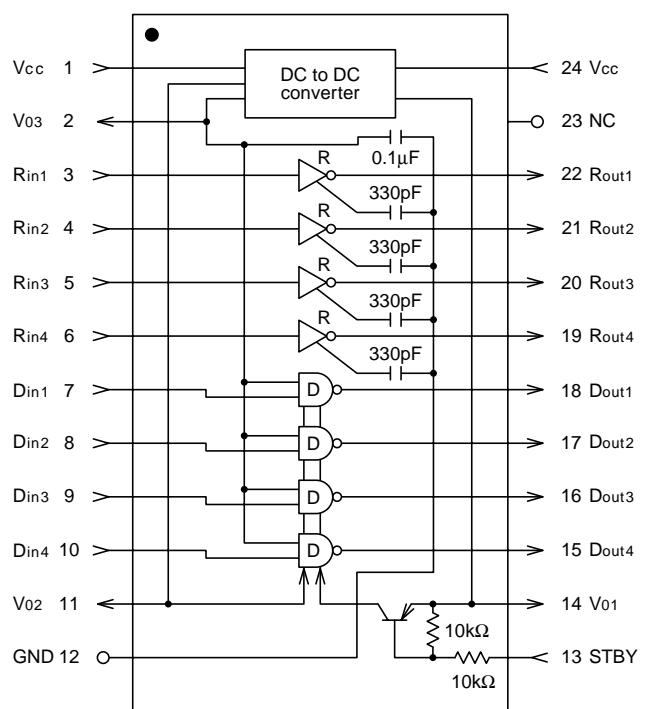
- This transceiver module contains all necessary components, such as the DC to DC converter, driver IC (equivalent to type 75188), receiver IC (equivalent to type 75189), and capacitors. They can thus be implemented without additional external parts.
- It can be used for applications with isolated signal lines.
- A built-in standby mode – activated by switching the STBY terminal high – provides a low-current idle state.

SHAPES AND DIMENSIONS



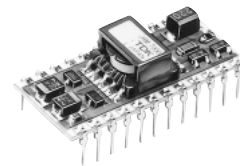
Weight: 3.9g typ.
Dimensions in mm

BLOCK DIAGRAM



MAXIMUM RATING

Temperature range	Operating T _{OPR}	0 to +70°C
	Storage T _{STG}	-20 to +85°C
Storage humidity range	H	20 to 95(%)RH [Maximum wet-bulb temperature:38°C]
Power supply voltage	V _{CC}	0 to 5.5V
Output voltage 1,2	V _{O1} , V _{O2}	±15V
Output voltage 3	V _{O3}	+5.5V
Output current 3	I _{O3}	+30mA
Driver input voltage	V _{DI}	-15 to +7V
Driver output voltage	V _{DO}	-15 to +15V
Receiver input voltage	V _{RI}	-30 to +30V
Receiver output current	I _{RO}	20mA



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ELECTRICAL CHARACTERISTICS (Maximum and minimum values are defined as absolute values.)

Power supply				Minimum	Typical	Maximum	Measuring condition
Input voltage		V _{CC}	V	4.75	5	5.25	
Input current		I _{CC}	mA	—	215	275	V _{DI} =2V V _{RI} =2.25V
Output voltage	1*1	V _{O1}	V	—	10	15	V _{DI} =2V V _{RI} =2.25V
	2*1	V _{O2}	V	—	-10	-15	V _{DI} =2V V _{RI} =2.25V
	3	V _{O3}	V	4.5	5	5.5	
Output ripple voltage*2		V _{OR}	mV	—	200	600	
Control terminal	When ON	I _{RON}	mA		-1.1	-3	
	Leakage current	I _{RLEAK}	μA		—	-20	
Primary-secondary insulation withstand voltage Eac		V _{BK}	V	500			
Receiver				Minimum	Typical	Maximum	Measuring condition
Threshold voltage		V _{RIH}	V	2.25	—	—	
		V _{RIL}	V	—	—	0.65	
Output voltage		V _{ROH}	V	2.4	4	V _{CC}	V _{RI} =0.65V I _{ROH} =-0.5mA
		V _{ROL}	V	—	0.2	0.5	V _{RI} =2.25V I _{ROL} =10.5mA
Driver (be connected STBY and GND terminals)				Minimum	Typical	Maximum	Measuring condition
Threshold voltage		V _{DIH}	V	2	—	—	
		V _{DIL}	V	—	—	0.8	
Output voltage		V _{DOH}	V	7	8.5	15	V _{RI} =0.8V R _L =3kΩ
		V _{DOL}	V	-7	-8.5	-15	V _{RI} =2V R _L =3kΩ

*1 Power can not be supplied to the external load from output voltage 1 or 2.

*2 A capacitor can be connected between terminals No.14 to 12, No.11 to 12 to improve the output ripple voltage.

APPLICATION EXAMPLE

HIM-7000 ISOLATION TYPE RS-232C

