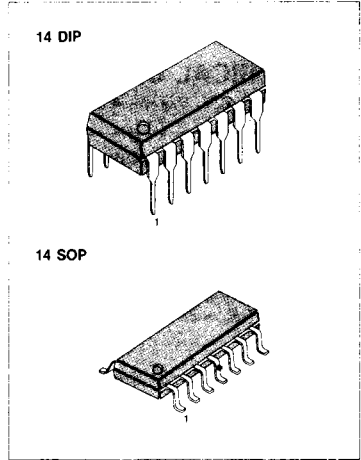


QUAD CMOS LINE RECEIVER

The KS5789A is designed to interface data terminal equipment (DTE) with data communications equipment (DCE) in conformance with the specifications of EIA RS-232-C, CCITT V.24 standards.

FEATURES

- Low power consumption & low delay slew
- Inputs withstand $\pm 30V$
- Fail-safe operating mode
- Internal noise filter
- Internal input threshold with hysteresis



ORDERING INFORMATION

Device	Package	Operating Temperature
KS5789A	14 DIP	- 40 ~ + 85°C
KS5789AD	14 SOP	

PIN CONFIGURATION

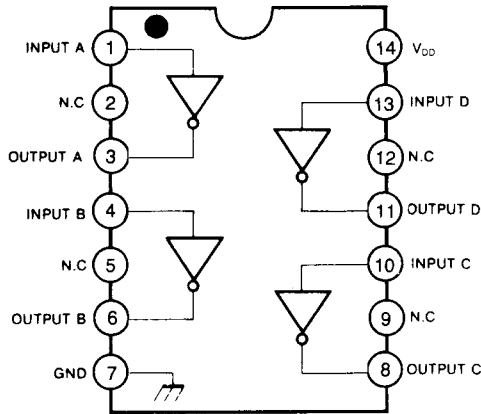


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{DD}	-0.5 ~ 7.0	V _{dc}
Input Voltage	V _I	-30 ~ 30	V _{dc}
Output Voltage	V _O	-0.3 ~ V _{CC} + 0.3	V _{dc}
Power Dissipation (85°C)	P _D	500	mW
Operating Temperature	T _{OPR}	-40 ~ 85	°C
Storage Temperature	T _{STG}	-65 ~ 150	°C

ELECTRICAL CHARACTERISTICS

(V_{DD} = 5V ± 0.5V, Ta = -40°C to 85°C, unless otherwise noted)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
DC ELECTRICAL CHARACTERISTICS						
Operating Current	I _{DD}	R _L = ∞, V _{IN} = V _{IL(min)} to V _{IH(max)}			600	μA
Input Current	I _I	V _{IN} = 3V	0.43		1.0	mA
		V _{IN} = -3V	-0.43		-1.0	
		V _{IN} = 25V	3.6		8.3	
		V _{IN} = -25V	-3.6		-8.3	
Input Voltage Low	V _{IL}		0.5		1.7	V _{dc}
Input Voltage High	V _{IH}		1.3		2.5	V _{dc}
Input Hysteresis Voltage	V _{HYS}	V _{IH} - V _{IL}		1.0		V _{dc}
Output Voltage Low	V _{OL}	V _{IN} = V _{IH(max)} , I _{OUT} = 3.2mA			0.4	V _{dc}
Output Voltage High	V _{OH}	V _{IN} = V _{IL(min)} , I _{OUT} = -3.2mA	2.8			V _{dc}
SWITCHING CHARACTERISTICS (V _{DD} = 4.5V to 5.5V, Ta = -40° ~ 85°C, C _L = 50pF, Note 1)						
Output Rise Time	t _R				300	nS
Output Fall Time	t _F				300	nS
Propagation Delay	t _{D (P)}	Input pulse width ≥ 10μS			6.5	μS
Propagation Delay Skew	t _{D (PDS)}			400		nS
Pulse Width Assumed to be Noise	t _{PWAN}				1.0	μS

Note 1: Test waveform t_r = t_f = 200ns, V_{IH} = +3V, V_{IL} = -3V, f = 20KHz.