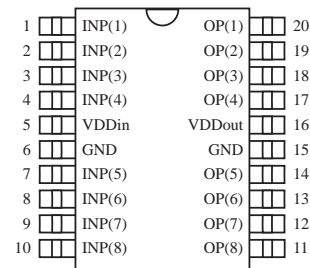


**P/ACTIVE OCTAL RELAY DRIVER****Features**

- Octal relay driver for up to 40mA of sink current
- Open drain outputs with diodes for inductive load protection
- Less than 10 $\mu$ A of standby current
- 5 KV ESD protection

**Pin Assignments****PAC27A88****Product Description**

CAMD's P/Active 27A88 is an 8 channel, open drain driver with low ON resistance and integrated protection diodes for inductive load switching. Each output can sink 40mA and all outputs may be active simultaneously. The circuit has two VDD connections for separation of the logic ( $VDD_{IN}$ ) and load ( $VDD_{OUT}$ ) supplies. A logic high on an input causes the corresponding output driver to turn ON and sink current from the load. A logic low on an input causes the corresponding output driver to turn OFF. When the switching inductive loads, the output protection diodes clamp the outputs to  $VDD_{OUT}$ . All inputs have pull downs to insure that the outputs are OFF when the inputs are open circuited. The inputs are fully compatible with CMOS logic and allow the PAC27A88 to be driven directly from microcontrollers and ASICs. CAMD's PAC27A88 is available in 20-pin small outline packages for space saving and manufacturing efficiency.

ABSOLUTE MAXIMUM RATINGS		
Parameter	Symbol	Rating
Supply voltage	VDDout	-0.5V to 7V
Input clamp voltage	VDDin	-0.5V to 12V
Voltage at any output	Vout	-0.5V to VDDout 0.8V
Voltage at any input	Vin	-0.5V to VDDin 0.5V
Sink current into any output (ON or OFF)	Iout	80mA
Current into any input	Iin	10mA
Operating Temperature Range	T <sub>A</sub>	-40°C to 70°C
Storage Temperature	T <sub>stg</sub>	-65°C to 150°
Package Power Rating		1.00W, max.

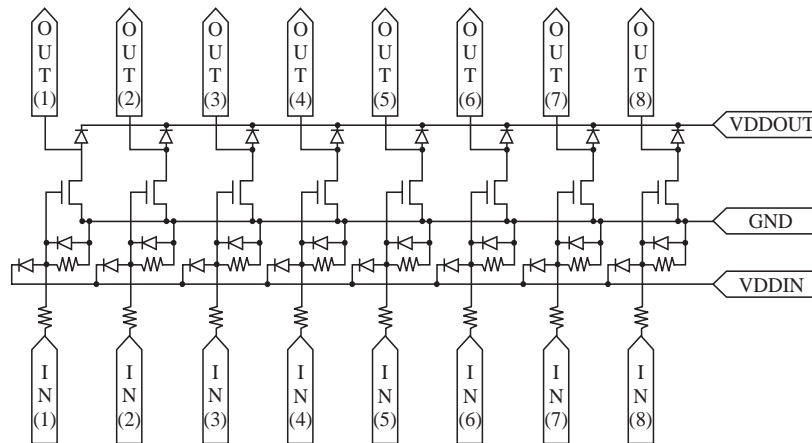
The absolute maximum ratings are limiting values, to be applied individually, beyond which the device may be permanently damaged. Functional operation under any of these conditions is not guaranteed. Exposing the device to its absolute maximum rating may affect its reliability.

RECOMMENDED OPERATING CONDITIONS (-40°C TP 70°C)		
Parameter	Symbol	Rating
Supply voltage	VDDout	5V
Input clamp voltage	VDDin	5V

ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25°C, VDD = 5V ± 10%)				
Parameter	Condition	Min	Typ	Max
Driver output voltage Low	V <sub>in</sub> = VDD, I <sub>out</sub> = 40mA		150mV	300mV
Driver output voltage High	V <sub>in</sub> = 0, I <sub>out</sub> = 40mA			VDD + 1.1V
Driver output leakage current	V <sub>in</sub> = 0, V <sub>out</sub> = VDD			1 $\mu$ A
Driver input low voltage		0		0.3V
Driver input high voltage		VDD - 0.3V		VDD
Driver input current	V <sub>in</sub> = 5V		40 $\mu$ A	



Block Diagram



STANDARD PART ORDERING INFORMATION				
Package		Ordering Part Number		
Pins	Style	Tubes	Tape & Reel	Part Marking
20	SOIC	PAC27A88S/T	PAC27A88S/R	PAC27A88S