

## Electrical Characteristics (Notes 1, 2) (Continued)

( $T_A = 25^\circ\text{C}$ ,  $V_{CC} = +5\text{V}$  to  $+15\text{V}$ , unless otherwise specified)

Parameter	Conditions	Limits			Units
		Min	Typ	Max	
Output Voltage Drop (Low)	V <sub>CC</sub> = 15V				
	I <sub>SINK</sub> = 10mA		0.1	0.25	V
	I <sub>SINK</sub> = 50mA		0.4	0.75	V
	I <sub>SINK</sub> = 100mA		2	2.5	V
	I <sub>SINK</sub> = 200mA		2.5		V
	V <sub>CC</sub> = 5V				
	I <sub>SINK</sub> = 8mA		0.15	0.4	V
	I <sub>SINK</sub> = 5mA		0.1	0.35	V
Output Voltage Drop (High)	I <sub>SOURCE</sub> = 200mA, V <sub>CC</sub> = 15V	12.75	12.5		V
	I <sub>SOURCE</sub> = 100mA, V <sub>CC</sub> = 15V		13.3		V
	V <sub>CC</sub> = 5V		3.3		V
Rise Time of Output			100	300	ns
Fall Time of Output			100	300	ns

**Note 1:** All voltages are measured with respect to the ground pin, unless otherwise specified.

**Note 2:** Absolute Maximum Ratings indicate limits beyond which damage to the device may occur. Operating Ratings indicate conditions for which the device is functional, but do not guarantee specific performance limits. Electrical Characteristics state DC and AC electrical specifications under particular test conditions which guarantee specific performance limits. This assumes that the device is within the Operating Ratings. Specifications are not guaranteed for parameters where no limit is given, however, the typical value is a good indication of device performance.

**Note 3:** For operating at elevated temperatures the device must be derated above  $25^\circ\text{C}$  based on a  $+150^\circ\text{C}$  maximum junction temperature and a thermal resistance  $170^\circ\text{C/W}$  (S0-8), junction to ambient.

**Note 4:** Supply current when output high typically 9mA and MAX. is 13mA at  $V_{CC}=15\text{V}$ .

**Note 5:** Tested at  $V_{CC} = 5\text{V}$  and  $V_{CC} = 15\text{V}$ .

**Note 6:** This will determine the maximum value of  $R_A + R_B$  for 15V operation. The maximum total ( $R_A + R_B$ ) is  $20\text{M}\Omega$ .

**Note 7:** No protection against excessive pin 7 current is necessary providing the package dissipation rating will not be exceeded.

## RECOMMENDED OPERATING

	MIN	MAX.	UNIT
Supply voltage ,Vcc	4.5	16	V
Input voltage (control,reset,threshold, and trigger )		Vcc	
Output current		$\pm 200$	mA
Operating free-air temperature, $T_A$	0	70	$^\circ\text{C}$