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## NTE15027 & NTE1826 Integrated Circuit VCR 3 Input Switch

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$ , unless otherwise specified)

Supply Voltage, $V_{CC}$ .....	14V
$e_{in}$ .....	$5V_{p-p}$
Input Voltage, $V_{IN}$ .....	3 to $V_{CC} + 0.3V$
Power Dissipation, $P_D$ .....	500mW
Operating Temperature Range, $T_{opr}$ .....	-10 to $80^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	-50 to $125^\circ\text{C}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage	$V_{CC}$		80	20	100	V
Supply Current	$I_{CC}$	$S_1 = S_2 = 2$ $S_3 = 2$ $S_4 = 2$ $S_5 = 2$ $S_6 = 2$	4.4	5.4	6.8	mA
Frequency Characteristics	$O_{F1}$	$V_i = 2.5V_{p-p}$ $V_o(20\text{Hz})/V_o(100\text{kHz})$	-	-	$\pm 0.5$	dB
	$O_{F2}$	$V_i = 20V_{p-p}$ $V_o(5\text{MHz})/V_o(100\text{kHz})$				
Insertion Loss	$G_L$	$V_i = 2.5V_{p-p}$ , 100kHz $V_o/V_i$	-0.5	-0.3	-	dB
Total Harmonic Distortion	THD <sub>1</sub>	$V_i = 2.5V_{p-p}$ , 1kHz	-	0.2	0.5	%
	THD <sub>2</sub>	$V_i = 2.0V_{p-p}$ , 4.43MHz	-	0.4	1.0	
Crosstalk	$C_{R1}$	$V_i = 2.0V_{p-p}$ , 4.45MHz	-	-	-50	dB
	$C_{R2}$	$V_i = 2.0V_{p-p}$ , 4.45MHz	-	-	-50	dB
Offset Voltage	$V_{OFF}$	Note 4	-	-	$\pm 15$	mV
Impedance	$R_i$		-	15	-	k $\Omega$
Impedance	$R_o$		-	10	-	$\Omega$

- Notes**
- 1 A  $S_1 = S_4 = 1$        $S_2 = S_3 = S_5 = S_6 = 2$   
    B  $S_2 = S_5 = 1$        $S_1 = S_3 = S_4 = S_6 = 2$   
    C  $S_3 = 1$                $S_1 = S_2 = S_4 = S_5 = S_6 = 2$
  - 2 A  $S_1 = S_4 = 1$   
    B  $S_2 = S_5 = 1$   
    C  $S_3 = 1, S_4 = S_5 = 2$  or 3
  - 3 A  $S_6 = 1$
  - 4 A  $S_4 = 1$   
    B  $S_5 = 1$               C  $S_4 = S_5 = S_6 = 2$       D  $S_6 = 1$



### Pin Connection Diagram



