

Figure 6b2-1. Test schematic, slew rate assessments

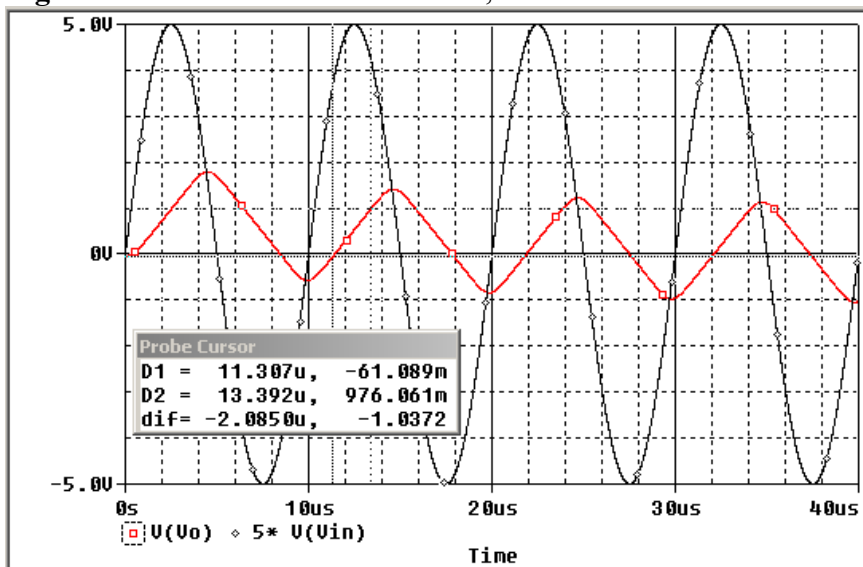


Figure 6b2-2. Output and slew rate assessments

By cursor measurement, slew rate = $1.03/2.08 = 0.495 \text{ V/us}$

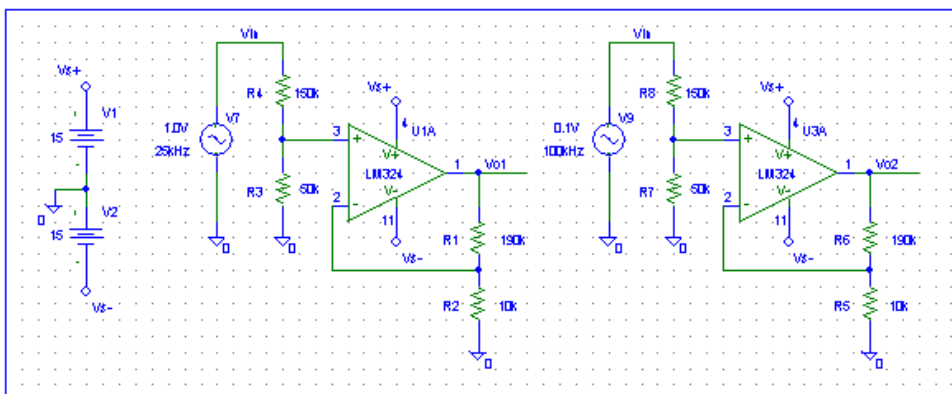


Figure 6b2-3: Slew Rate distortion tests. Circuit setup

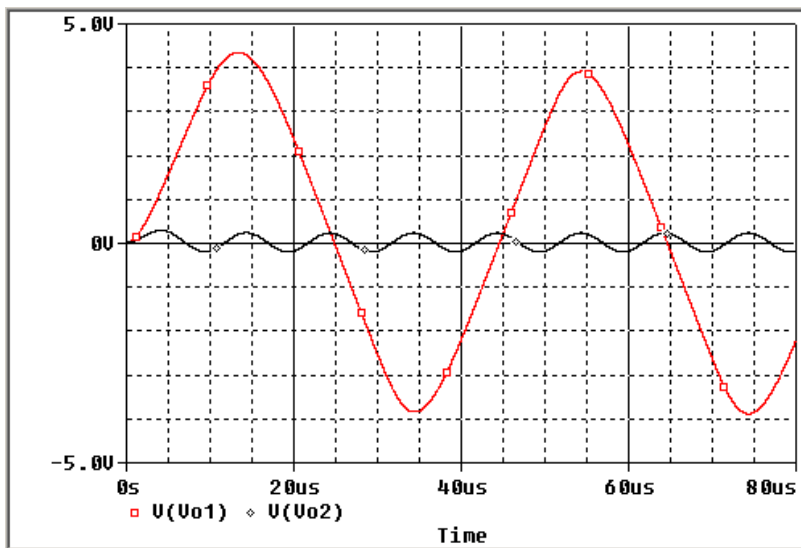


Figure 6b2-4: Slew Rate distortion tests. Outputs for the two situations

DC COMPONENT = 1.790263E-02					
HARMONIC NO	FREQUENCY (HZ)	FOURIER COMPONENT	NORMALIZED COMPONENT	PHASE (DEG)	NORMALIZED PHASE (DEG)
1	2.500E+04	3.668E+00	1.000E+00	-4.099E+01	0.000E+00
2	5.000E+04	4.652E-03	1.268E-03	6.614E+01	1.481E+02
3	7.500E+04	2.121E-01	5.782E-02	6.463E+01	1.876E+02
4	1.000E+05	7.202E-04	1.963E-04	-4.509E+01	1.189E+02
5	1.250E+05	2.660E-02	7.251E-03	-1.666E+02	3.836E+01
6	1.500E+05	9.761E-04	2.661E-04	4.233E+00	2.502E+02
7	1.750E+05	6.213E-03	1.694E-03	-1.696E+01	2.700E+02
8	2.000E+05	4.841E-04	1.320E-04	7.721E+00	3.356E+02
9	2.250E+05	1.323E-03	3.605E-04	1.080E+02	4.769E+02
10	2.500E+05	4.619E-04	1.259E-04	9.119E-01	4.108E+02
TOTAL HARMONIC DISTORTION = 5.831354E+00 PERCENT					

Figure 6b2-5a: Distortion analysis (Fourier) for 25kHz, 1.0V input

DC COMPONENT = 2.103803E-02					
HARMONIC NO	FREQUENCY (HZ)	FOURIER COMPONENT	NORMALIZED COMPONENT	PHASE (DEG)	NORMALIZED PHASE (DEG)
1	1.000E+05	2.179E-01	1.000E+00	-6.525E+01	0.000E+00
2	2.000E+05	2.488E-05	1.142E-04	5.842E+01	1.889E+02
3	3.000E+05	2.984E-04	1.369E-03	-6.769E+00	1.890E+02
4	4.000E+05	5.972E-08	2.740E-07	-1.709E+02	9.016E+01
5	5.000E+05	3.731E-07	1.712E-06	1.107E+02	4.370E+02
6	6.000E+05	3.566E-09	1.636E-08	-1.348E+02	2.567E+02
7	7.000E+05	8.740E-09	4.011E-08	-9.936E+01	3.574E+02
8	8.000E+05	2.540E-09	1.166E-08	-1.463E+02	3.757E+02
9	9.000E+05	8.264E-09	3.792E-08	1.747E+02	7.620E+02
10	1.000E+06	2.353E-09	1.080E-08	-1.318E+02	5.208E+02
TOTAL HARMONIC DISTORTION = 1.373886E-01 PERCENT					

Figure 6b2-5b: Distortion analysis (Fourier) for 100kHz, 0.1V input

- (b-2). The 25kHz, 1.0V signal is noticeably distorted (THD = 5.8%).
The 100kHz, 0.1V signal is not appreciably distorted (THD = 0.14%)