

LEC 5 OP-AMP BODE PLOT

MEASURED				CALCULATED			
FREQ	AMPLITUDE		DELAY	GAIN	GAIN (dB)	PERIOD	PHASE
f	v_{in} pk-pk	v_{out} pk-pk	t_d	$\frac{v_{out}}{v_{in}}$	$20 \cdot \log\left(\frac{v_{out}}{v_{in}}\right)$	$T = \frac{1}{f}$	$-360^\circ \cdot \left(\frac{t_d}{T}\right)$
100Hz	100mV	10V	0	100	+40	10ms	0°
1kHz		9.92	20μs	99	39.9	1ms	-7.2°
f_{3dB} 10kHz		7.0V	12.8μs	70	36.9	100ms	-46°
100kHz		0.936V	2.4μs	9.4	19.5	10ms	-86°
1MHz		95mV	336ns	0.95	-0.5	1μs	-121°

