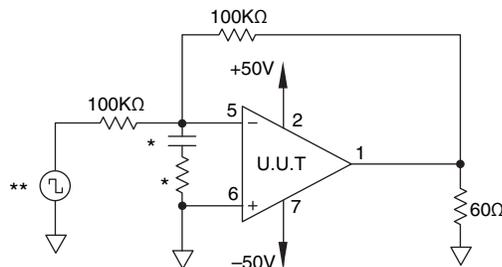


*Table 4 Group A Inspection*

SG	PARAMETER	SYMBOL	TEMP.	POWER	TEST CONDITIONS	MIN	MAX	UNITS
1	Quiescent Current	$I_O$	25°C	±150V	$V_{IN} = 0, A_V = 100$		8.5	mA
1	Input Offset Voltage	$V_{OS}$	25°C	±150V	$V_{IN} = 0, A_V = 100$		3	mV
1	Input Offset Voltage	$V_{OS}$	25°C	±15V	$V_{IN} = 0, A_V = 100$		5.7	mV
1	Input Bias Current, +IN	$+I_B$	25°C	±150V	$V_{IN} = 0$		50	pA
1	Input Bias Current, -IN	$-I_B$	25°C	±150V	$V_{IN} = 0$		50	pA
1	Input Offset Current	$I_{OS}$	25°C	±150V	$V_{IN} = 0$		50	pA
3	Quiescent Current	$I_O$	-55°C	±150V	$V_{IN} = 0, A_V = 100$		10	mA
3	Input Offset Voltage	$V_{OS}$	-55°C	±150V	$V_{IN} = 0, A_V = 100$		5	mV
3	Input Offset Voltage	$V_{OS}$	-55°C	±15V	$V_{IN} = 0, A_V = 100$		7.7	mV
3	Input Bias Current, +IN	$+I_B$	-55°C	±150V	$V_{IN} = 0$		50	pA
3	Input Bias Current, -IN	$-I_B$	-55°C	±150V	$V_{IN} = 0$		50	pA
3	Input Offset Current	$I_{OS}$	-55°C	±150V	$V_{IN} = 0$		50	pA
2	Quiescent Current	$I_O$	125°C	±150V	$V_{IN} = 0, A_V = 100$		10	mA
2	Input Offset Voltage	$V_{OS}$	125°C	±150V	$V_{IN} = 0, A_V = 100$		5.5	mV
2	Input Offset Voltage	$V_{OS}$	125°C	±15V	$V_{IN} = 0, A_V = 100$		8.2	mV
2	Input Bias Current, +IN	$+I_B$	125°C	±150V	$V_{IN} = 0$		10	nA
2	Input Bias Current, -IN	$-I_B$	125°C	±150V	$V_{IN} = 0$		10	nA
2	Input Offset Current	$I_{OS}$	125°C	±150V	$V_{IN} = 0$		10	nA
4	Output Voltage, $I_O = 75mA$	$V_O$	25°C	±85V	$R_L = 1K$	75		V
4	Output Voltage, $I_O = 29mA$	$V_O$	25°C	±150V	$R_L = 5K$	145		V
4	Current Limits	$I_{CL}$	25°C	±30V	$R_L = 100\Omega$	75	125	mA
4	Stability/Noise	$E_N$	25°C	±150V	$R_L = 5K, A_V = 1, C_L = 10nF$		1	mV
4	Slew Rate	SR	25°C	±150V	$R_L = 5K$	20	80	V/ $\mu s$
4	Open Loop Gain	$A_{OL}$	25°C	±150V	$R_L = 5K, F = 10Hz$	96		dB
4	Common Mode Rejection	CMR	25°C	±32.5V	$R_L = 5K, F = DC, V_{CM} = \pm 22.5V$	90		dB
6	Output Voltage, $I_O = 40mA$	$V_O$	-55°C	±45V	$R_L = 1K$	40		V
6	Output Voltage, $I_O = 29mA$	$V_O$	-55°C	±150V	$R_L = 5K$	145		V
6	Stability/Noise	$E_N$	-55°C	±150V	$R_L = 5K, A_V = 1, C_L = 10nF$		1	mV
6	Slew Rate	SR	-55°C	±150V	$R_L = 5K$	20	80	V/ $\mu s$
6	Open Loop Gain	$A_{OL}$	-55°C	±150V	$R_L = 5K, F = 10Hz$	96		dB
6	Common Mode Rejection	CMR	-55°C	±32.5V	$R_L = 5K, F = DC, V_{CM} = \pm 22.5V$	90		dB
5	Output Voltage, $I_O = 40mA$	$V_O$	125°C	±45V	$R_L = 1K$	40		V
5	Output Voltage, $I_O = 29mA$	$V_O$	125°C	±150V	$R_L = 5K$	145		V
5	Stability/Noise	$E_N$	125°C	±150V	$R_L = 5K, A_V = 1, C_L = 10nF$		1	mV
5	Slew Rate	SR	125°C	±150V	$R_L = 5K$	20	80	V/ $\mu s$
5	Open Loop Gain	$A_{OL}$	125°C	±150V	$R_L = 5K, F = 10Hz$	96		dB
5	Common Mode Rejection	CMR	125°C	±32.5V	$R_L = 5K, F = DC, V_{CM} = \pm 22.5V$	90		dB

**BURN IN CIRCUIT**



\* These components are used to stabilize device due to poor high frequency characteristics of burn in board.

\*\* Input signals are calculated to result in internal power dissipation of approximately 2.1W at case temperature = 125°C.

## **TECH ALERT**

Please refer to TA-PCN-2014-0484 on the product PA83 family web page for the latest device specifications.

<http://www.apexanalog.com/apex-products/pa83/>

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## **NEED TECHNICAL HELP? CONTACT APEX SUPPORT!**

For all Apex Microtechnology product questions and inquiries, call toll free 800-546-2739 in North America.

For inquiries via email, please contact [apex.support@apexanalog.com](mailto:apex.support@apexanalog.com).

International customers can also request support by contacting their local Apex Microtechnology Sales Representative.

To find the one nearest to you, go to [www.apexanalog.com](http://www.apexanalog.com)

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