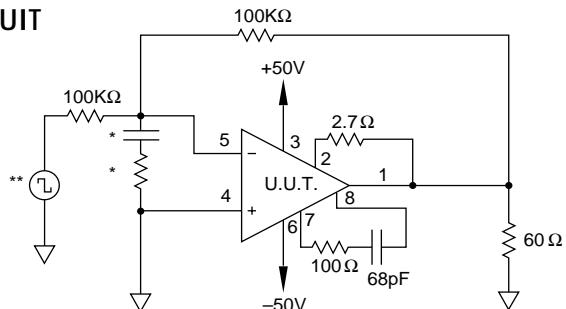


**TABLE 4 GROUP A INSPECTION**
**PA88M**

HTTP://WWW.APEXMICROTECH.COM (800) 546-APEX (800) 546-2739

SG	PARAMETER***	SYMBOL	TEMP.	POWER	TEST CONDITIONS	MIN	MAX	UNITS
1	Quiescent current	$I_Q$	25°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		2	mA
1	Input offset voltage	$V_{OS}$	25°C	$\pm 15V$	$V_{IN} = 0, A_V = 100$		$\pm 4$	mV
1	Input offset voltage	$V_{OS}$	25°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		$\pm 2$	mV
1	Input bias current, +IN	$+I_B$	25°C	$\pm 150V$	$V_{IN} = 0$		$\pm 50$	pA
1	Input bias current, -IN	$-I_B$	25°C	$\pm 150V$	$V_{IN} = 0$		$\pm 50$	pA
1	Input offset current	$I_{OS}$	25°C	$\pm 150V$	$V_{IN} = 0$		$\pm 100$	pA
3	Quiescent current	$I_Q$	-55°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		2.3	mA
3	Input offset voltage	$V_{OS}$	-55°C	$\pm 15V$	$V_{IN} = 0, A_V = 100$		$\pm 6.4$	mV
3	Input offset voltage	$V_{OS}$	-55°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		$\pm 4.4$	mV
3	Input bias current, +IN	$+I_B$	-55°C	$\pm 150V$	$V_{IN} = 0$		$\pm 50$	pA
3	Input bias current, -IN	$-I_B$	-55°C	$\pm 150V$	$V_{IN} = 0$		$\pm 50$	pA
3	Input offset current	$I_{OS}$	-55°C	$\pm 150V$	$V_{IN} = 0$		$\pm 50$	pA
2	Quiescent current	$I_Q$	125°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		2.3	mA
2	Input offset voltage	$V_{OS}$	125°C	$\pm 15V$	$V_{IN} = 0, A_V = 100$		$\pm 7$	mV
2	Input offset voltage	$V_{OS}$	125°C	$\pm 150V$	$V_{IN} = 0, A_V = 100$		$\pm 5$	mV
2	Input bias current, +IN	$+I_B$	125°C	$\pm 150V$	$V_{IN} = 0$		$\pm 10$	nA
2	Input bias current, -IN	$-I_B$	125°C	$\pm 150V$	$V_{IN} = 0$		$\pm 10$	nA
2	Input offset current	$I_{OS}$	125°C	$\pm 150V$	$V_{IN} = 0$		$\pm 10$	nA
4	Output voltage, $I_O = 100mA$	$V_O$	25°C	$\pm 32V$	$R_L = 200\Omega$	20		V
4	Output voltage, $I_O = 70mA$	$V_O$	25°C	$\pm 150V$	$R_L = 2K\Omega$	140		V
4	Output voltage, $I_O = 20mA$	$V_O$	25°C	$\pm 48V$	$R_L = 2K\Omega$	40		V
4	Current limits	$I_{CL}$	25°C	$\pm 50V$	$R_{CL} = 10\Omega, R_L = 200\Omega$	50	84	mA
4	Stability/noise	$E_N$	25°C	$\pm 150V$	$C_C = 68pF, R_C = 100\Omega, A_V = +1, C_L = 470pF$		1	mV
4	Slew rate	SR	25°C	$\pm 150V$	$R_L = 2K\Omega, A_V = 100, C_C = \text{OPEN}$	15		V/ $\mu$ s
4	Open loop gain	$A_{OL}$	25°C	$\pm 150V$	$R_L = 2K\Omega, F = 15Hz, C_C = \text{OPEN}$	96		dB
4	Common-mode rejection	CMR	25°C	$\pm 150V$	$F = DC, V_{CM} = \pm 90V$	90		dB
6	Output voltage, $I_O = 100mA$	$V_O$	-55°C	$\pm 32V$	$R_L = 200\Omega$	20		V
6	Output voltage, $I_O = 70mA$	$V_O$	-55°C	$\pm 150V$	$R_L = 2K\Omega$	140		V
6	Output voltage, $I_O = 20mA$	$V_O$	-55°C	$\pm 48V$	$R_L = 2K\Omega$	40		V
6	Stability/noise	$E_N$	-55°C	$\pm 150V$	$C_C = 68pF, R_C = 100\Omega, A_V = +1, C_L = 470pF$		1	mV
6	Slew rate	SR	-55°C	$\pm 150V$	$R_L = 2K\Omega, A_V = 100, C_C = \text{OPEN}$	15		V/ $\mu$ s
6	Open loop gain	$A_{OL}$	-55°C	$\pm 150V$	$R_L = 2K\Omega, F = 15Hz, C_C = \text{OPEN}$	96		dB
6	Common-mode rejection	CMR	-55°C	$\pm 150V$	$F = DC, V_{CM} = \pm 90V$	90		dB
5	Output voltage, $I_O = 75mA$	$V_O$	125°C	$\pm 29V$	$R_L = 200\Omega$	15		V
5	Output voltage, $I_O = 37mA$	$V_O$	125°C	$\pm 83V$	$R_L = 2K\Omega$	74		V
5	Output voltage, $I_O = 10mA$	$V_O$	125°C	$\pm 28V$	$R_L = 2K\Omega$	20		V
5	Stability/noise	$E_N$	125°C	$\pm 150V$	$C_C = 68pF, R_C = 100\Omega, A_V = +1, C_L = 470pF$		1	mV
5	Slew rate	SR	125°C	$\pm 150V$	$R_L = 2K\Omega, A_V = 100, C_C = \text{OPEN}$	15		V/ $\mu$ s
5	Open loop gain	$A_{OL}$	125°C	$\pm 150V$	$R_L = 2K\Omega, F = 15Hz, C_C = \text{OPEN}$	96		dB
5	Common-mode rejection	CMR	125°C	$\pm 150V$	$F = DC, V_{CM} = \pm 90V$	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.

\*\*\* An additional test is performed manually at  $T_C = 25^\circ\text{C}$  which stresses power supply, common mode range and output swing to  $\pm 225V$  (450V total).