



PA45DIE

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NO LONGER SUPPORTED FOR DESIGN-IN

ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE, +V _S to -V _S	150V
OUTPUT CURRENT, continuous	5A
INPUT VOLTAGE, differential	±16V
INPUT VOLTAGE, common mode	±V _S
TEMPERATURE, junction	150°C

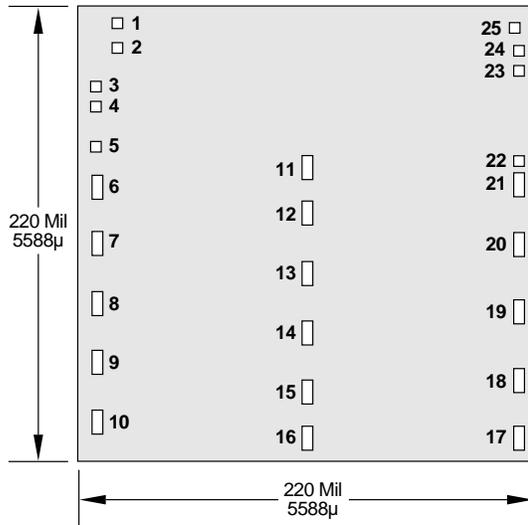
NOTE: Because of wafer probing test limitations, full power tests are not possible. Refer to parent product data sheet PA45 for typical AC, DC and power performance specifications.

DC WAFER PROBED SPECIFICATIONS

PARAMETER ¹	TEST CONDITIONS	MIN	MAX	UNITS
OFFSET VOLTAGE, initial	V _S = ±20V to ±75 V		25	mV
OFFSET VOLTAGE, vs. supply	V _S = ±20V		25	μV/V
BIAS CURRENT, initial	V _S = ±20V		1	nA
OFFSET CURRENT, initial	V _S = ±20V		1	nA
SUPPLY CURRENT, quiescent	V _S = ±20V		26	mA
COMMON MODE REJECTION	V _{CM} = ±45V, V _S = ±75V	84		dB
VOLTAGE SWING, positive	V _S = ±50V, I _O = 40mA	40		V
VOLTAGE SWING, negative	V _S = ±50V, I _O = -40mA	-40		V
ALARM, sink current	V _S = ±20V to ±75 V	90		μA
ALARM, leakage	V _S = ±20V to ±75 V		1	μA

NOTES: 1. Current limit, I_O pin, and shutdown verified as operational.

DIE LAYOUT



Thickness: 11 Mil (280μ)
 Backside: Silicon (no back metal)
 Small Bond pads: 5 Mil sq (127μ) Al
 Large Bond pads: 5 x 11 Mil (127μ x 280μ) Al

NOTE: Tie backside to -V_S through die attach medium. Recommended die attach material is either conductive epoxy or silver-glass. Lowest thermal resistance will be obtained with silver-glass.

Recommended wire is 2 mil aluminum. All large bond pads must be used to avoid excessive current density in the die metalization.

Pad	Function	Pad	Function
1	- Input	11-16	Output Drive
2	+ Input	17-21	+V _S
3*	Alarm	22*	I _O
4*	Shutdown	23	Compensation
5	NC	24	Compensation
6-10	-V _S	25	Current Limit Sense

* Pad 3 (Alarm) is tied to a switched current source. When an over-temperature condition exits the current source turns on and sinks 90μA to -V_S. Pad 4 (Shutdown) will shut off the output stage when at least 90μA is pulled from pad 4 to any voltage at least 3 volts less positive than +V_S (ground, for example). When pad 3 is tied to pad 4 an over-temperature condition will shut off the output stage until power is cycled and the fault is removed. Normally pad 22 (I_O) is left open. When pad 22 is tied to pad 23 the quiescent current in the output stage is disabled. The result is lower quiescent but class C biasing of the output stage.

CAUTION

PA45DIE is a MOSFET amplifier. ESD handling procedures must be observed.