

# Advanced Monolithic Systems

# D45H2A

*PNP POWER TRANSISTOR*

## FEATURES

- High Current Power Transistor
- DC Current Gain Specified at 8A
- TO-220 PACKAGE

## APPLICATIONS

- PowerPC™ Supplies
- Pentium Processor™ Supplies
- Other 2.5V to 3.6V Microprocessor Supplies
- Low Voltage Logic Supplies

## GENERAL DESCRIPTION

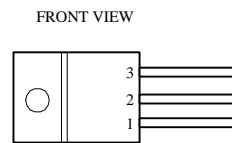
The D45H2A is designed as a power amplifier for linear regulator and switching regulators. This device functions as a power boosting circuit for LP2951 regulator. This configuration is used to power up the Pentium™ Processor generating up to 10 Amps output current.

## ORDERING INFORMATION:

PACKAGE TYPE	OPERATING JUNCTION TEMP. RANGE
TO-220	
AMSD45H2A	-55°C to +150°C

## PIN CONNECTIONS

- 1- Base
  - 2- Collector
  - 3- Emitter
- Tab is connected to Collector



## ABSOLUTE MAXIMUM RATINGS

Collector - Emitter Voltage	20V	Storage Temperature	-65°C to +150°C
Collector Current	10A	Power Dissipation @ T <sub>C</sub> =25°C	60 W
Junction Temperature	150°C	Thermal Resistance, Junction to Case	2.08°C/W

## ELECTRICAL CHARACTERISTICS

T<sub>C</sub> = 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Collector - Emitter Voltage	V <sub>CEO</sub>	I <sub>C</sub> = 100mA	18			V
Collector Cutoff Current	I <sub>CEO</sub>	V <sub>CB</sub> = 20			10	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5.0V			100	μA
DC Current Gain	H <sub>FE</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 8A	100	120		-
Collector - Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> = 8A, I <sub>B</sub> = 0.4A			1	V
Base - Emitter Saturation Voltage	V <sub>BE(SAT)</sub>	I <sub>C</sub> = 8A, I <sub>B</sub> = 0.8A			1.5	V