

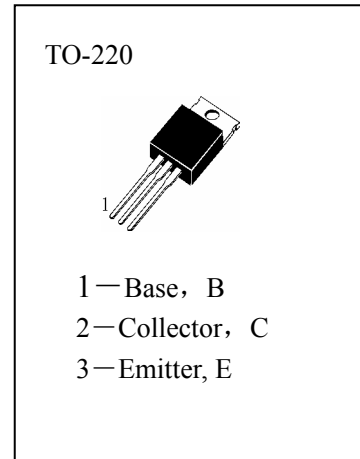
# HD313

## APPLICATIONS

Low Frequency Power Amplifier.

## ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

T <sub>stg</sub>	Storage Temperature	-55~150°C
T <sub>j</sub>	Junction Temperature	150°C
P <sub>C</sub>	Collector Dissipation (T <sub>c</sub> =25°C)	30W
P <sub>C</sub>	Collector Dissipation (T <sub>A</sub> =25°C)	1.75W
V <sub>CBO</sub>	Collector-Base Voltage	60V
V <sub>CEO</sub>	Collector-Emitter Voltage	60V
V <sub>EBO</sub>	Emitter-Base Voltage	5V
I <sub>C</sub>	Collector Current	3A



## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I <sub>CEO</sub>	Collector Cut-off Current			5	mA	V <sub>CE</sub> =60V, I <sub>B</sub> =0
I <sub>CBO</sub>	Collector Cut-off Current			0.1	mA	V <sub>CB</sub> =60V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cut-off Current			1	mA	V <sub>EB</sub> =4V, I <sub>C</sub> =0
H <sub>FE</sub> (1)	DC Current Gain	60		320		V <sub>CE</sub> =2V, I <sub>C</sub> =1A
H <sub>FE</sub> (2)	DC Current Gain	60				V <sub>CE</sub> =2V, I <sub>C</sub> =0.1A
V <sub>CE(sat)</sub>	Collector- Emitter Saturation Voltage		0.4	1	V	I <sub>C</sub> =2A, I <sub>B</sub> =0.2A
V <sub>BE</sub>	Base-Emitter Voltage			1.2	V	V <sub>CE</sub> =2V, I <sub>C</sub> =1A
f <sub>t</sub>	Current Gain-Bandwidth Product		8		MHz	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A,
C <sub>ob</sub>	Output Capacitance		65		pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz

## h<sub>FE</sub> Classification

D	E	F
60—120	100—200	160—320