

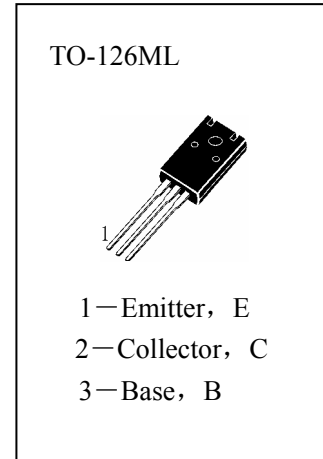
# HBD195

## APPLICATIONS

Medium 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)	10W
P <sub>C</sub>	Collector Dissipation (T <sub>A</sub> =25°C)	1.5W
V <sub>CBO</sub>	Collector-Base Voltage	50V
V <sub>CES</sub>	Collector-Emitter Voltage	40V
V <sub>CEO</sub>	Collector-Emitter Voltage	20V
V <sub>EBO</sub>	Emitter-Base Voltage	8V
I <sub>CP</sub>	Collector Current (Pulse)	10A
I <sub>C</sub>	Collector Current (DC)	5A
I <sub>b</sub>	Base Current	1A



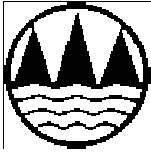
## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	20			V	I <sub>C</sub> =10mA, I <sub>B</sub> =0
I <sub>CBO</sub>	Collector Cut-off Current			100	nA	V <sub>CB</sub> =40V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cut-off Current			100	nA	V <sub>EB</sub> =8V, I <sub>C</sub> =0
H <sub>FE</sub> (1)	DC Current Gain	140		600		V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A
H <sub>FE</sub> (2)	DC Current Gain	70				V <sub>CE</sub> =2V, I <sub>C</sub> =5A
V <sub>CE(sat)</sub>	Collector- Emitter Saturation Voltage			1	V	I <sub>C</sub> =6A, I <sub>B</sub> =0.15A
V <sub>BE</sub>	Base-Emitter Voltage			1.5	V	V <sub>CE</sub> =2V, I <sub>C</sub> =4A
f <sub>T</sub>	Current Gain-Bandwidth Product		100		MHz	V <sub>CE</sub> =2V, I <sub>C</sub> =500mA
C <sub>ob</sub>	Output Capacitance		40		pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz

Pulse Test: PW=10Ms (max) ,Duty Cycle=30% (min)

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

Y	GR	BL
140—240	200—400	300—600



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