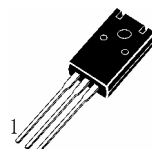
**HBD195****APPLICATIONS**

. .Medium Power Amplifie.

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

T_{stg}	Storage Temperature	-55~150 $^{\circ}\text{C}$
T_j	Junction Temperature	150 $^{\circ}\text{C}$
P_C	Collector Dissipation ($T_c=25^{\circ}\text{C}$)	10W
P_C	Collector Dissipation ($T_A=25^{\circ}\text{C}$)	1.5W
V_{CBO}	Collector-Base Voltage	50V
V_{CES}	Collector-Emitter Voltage	40V
V_{CEO}	Collector-Emitter Voltage	20V
V_{EBO}	Emitter-Base Voltage	8V
I_{CP}	Collector Current (Pulse)	10A
I_C	Collector Current (DC)	5A
I_b	Base Current	1A

TO-126ML



1—Emitter, E
2—Collector, C
3—Base, B

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	20			V	$I_C=10\text{mA}$, $I_B=0$
I_{CBO}	Collector Cut-off Current			100	nA	$V_{\text{CB}}=40\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			100	nA	$V_{\text{EB}}=8\text{V}$, $I_C=0$
$H_{\text{FE}}(1)$	DC Current Gain	140		600		$V_{\text{CE}}=2\text{V}$, $I_C=0.5\text{A}$
$H_{\text{FE}}(2)$	DC Current Gain	70				$V_{\text{CE}}=2\text{V}$, $I_C=5\text{A}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			1	V	$I_C=6\text{A}$, $I_B=0.15\text{A}$
V_{BE}	Base-Emitter Voltage			1.5	V	$V_{\text{CE}}=2\text{V}$, $I_C=4\text{A}$
f_T	Current Gain-Bandwidth Product		100		MHz	$V_{\text{CE}}=2\text{V}$, $I_C=500\text{mA}$
C_{ob}	Output Capacitance		40		pF	$V_{\text{CB}}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

Pulse Test: $PW=10\text{Ms}$ (max) ,Duty Cycle=30% (min) **h_{FE} Classification**

Y

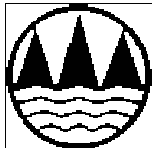
GR

BL

140—240

200—400

300—600



HBD195

