



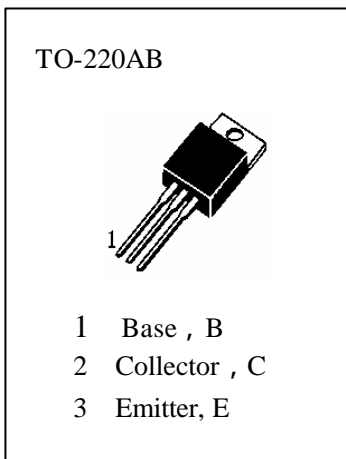
HED880

APPLICATIONS

Low Frequency Power Amplifier.

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg} —Storage Temperature.....	-55~150
T_j —Junction Temperature.....	150
P_C —Collector Dissipation ($T_c=25$)	30W
V_{CBO} —Collector-Base Voltage.....	60V
V_{CEO} —Collector-Emitter Voltage.....	60V
V_{EBO} —Emitter-Base Voltage.....	7V
I_C —Collector Current.....	3A
I_b —Base Current.....	0.3A



ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	60			V	$I_C=50mA, I_B=0$
I_{CBO}	Collector Cut-off Current			100	μA	$V_{CB}=60V, I_E=0$
I_{EBO}	Emitter Cut-off Current			100	μA	$V_{EB}=7V, I_C=0$
$H_{FE} (1)$	DC Current Gain	60		300		$V_{CE}=5V, I_C=0.5 A$
$H_{FE} (2)$	DC Current Gain	20				$V_{CE}=5V, I_C=3A$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		0.4	1	V	$I_C=3A, I_B=0.3A$
$V_{BE(on)}$	Base-Emitter On Voltage		0.7	1	V	$V_{CE}=5V, I_C=0.5A$
f_t	Current Gain-Bandwidth Product		3		MHZ	$V_{CE}=5V, I_C=0.5A,$
C_{ob}	Output Capacitance		70		pF	$V_{CB}=10V, I_E=0, f=1MHz$
t_{ON}	Turn-On Time		0.8		μS	} $I_{B1} = -I_{B2} = 0.2A$ $V_{CC} = 30V$
t_{STG}	Storage Time		1.5		μS	
t_F	Fall Time		0.8		μS	

h_{FE} Classification

O	Y	GR
60—120	100—200	150—300

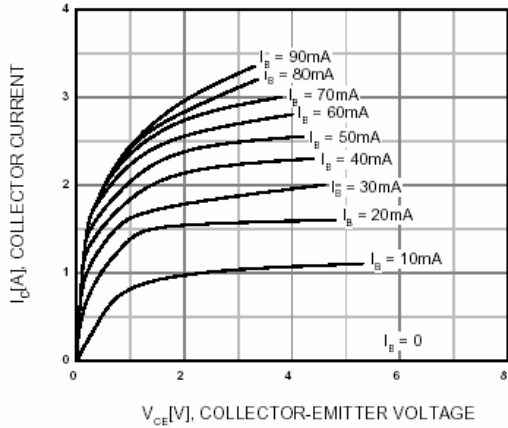


Figure 1. Static Characteristic

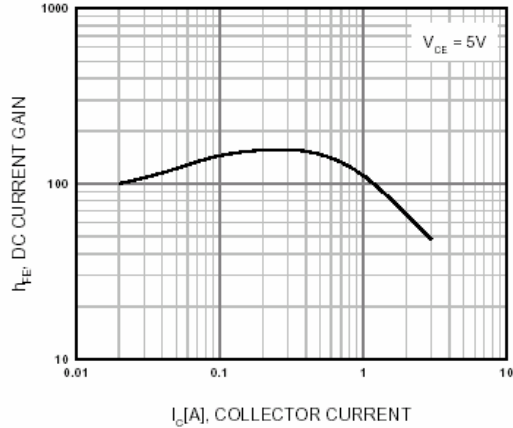


Figure 2. DC current Gain

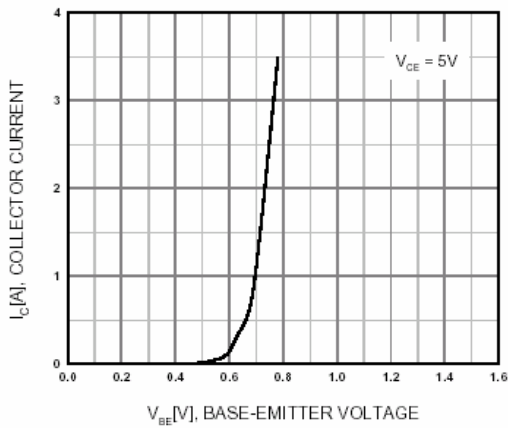


Figure 3. Base-Emitter On Voltage

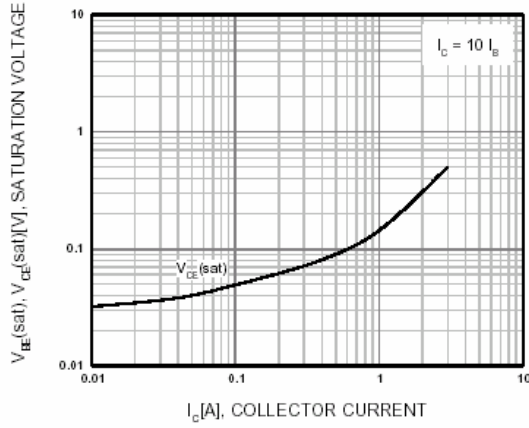


Figure 4. Collector-Emitter Saturation Voltage vs Collector Current

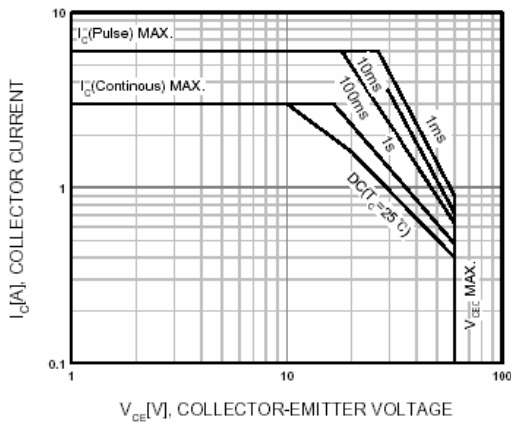


Figure 5. Safe Operating Area

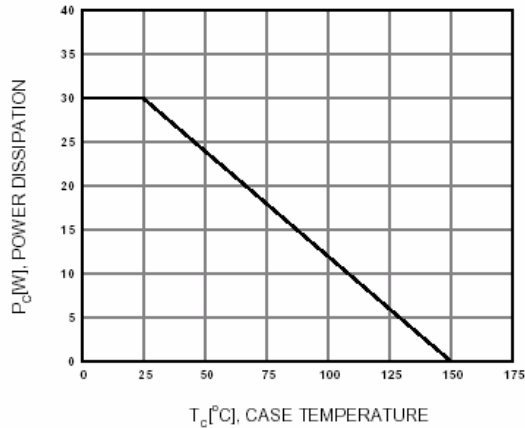


Figure 6. Power Derating