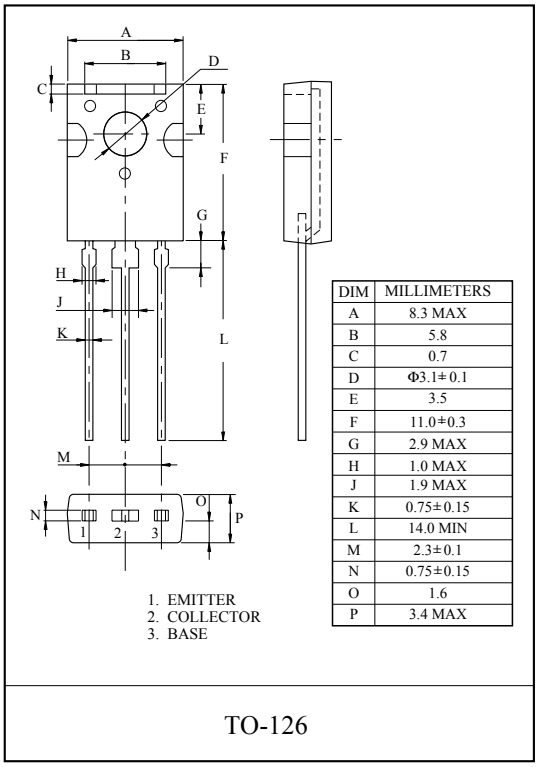
LOW FREQUENCY POWER AMP,
MEDIUM SPEED SWITCHING APPLICATIONS

FEATURES

· High breakdown voltage V_{CEO} 120V, high current 1A.

· Low saturation voltage and good linearity of h_{FE}.



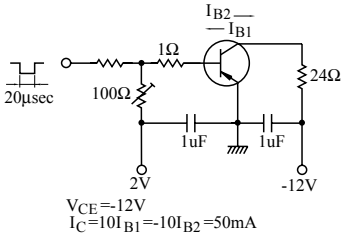
DIM	MILLIMETERS
A	8.3 MAX
B	5.8
C	0.7
D	Φ3.1±0.1
E	3.5
F	11.0±0.3
G	2.9 MAX
H	1.0 MAX
J	1.9 MAX
K	0.75±0.15
L	14.0 MIN
M	2.3±0.1
N	0.75±0.15
O	1.6
P	3.4 MAX

TO-126

MAXIMUM RATING (Ta=25℃)

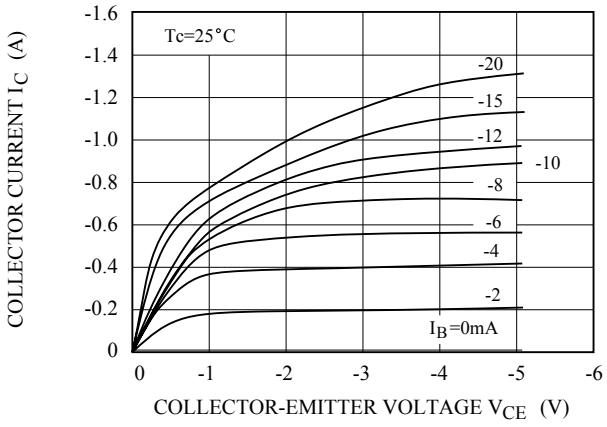
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-120	V
Collector-Emitter Voltage		V_{CEO}	-120	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1	A
		I_{CP}	-2	
Collector Power Dissipation	Ta=25℃	P_C	1.5	W
	Tc=25℃		8	
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

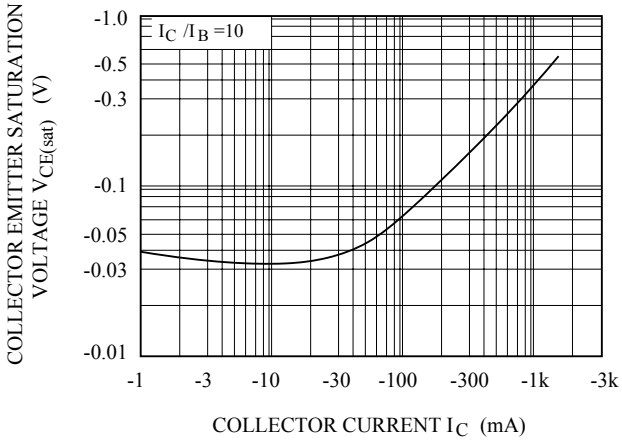
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut of Current		I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-1	μA
Emitter Cut of Current		I_{EBO}	V_{EB}=-4V, I_C=0	-	-	-1	μA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	I_C=-10μA	-120	-	-	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=-1mA	-120	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=-10μA	-5	-	-	V
DC Current Gain		h_{FE}(1) Note	V_{CE}=-5V, I_C=-50mA	100	-	320	
		h_{FE}(2)	V_{CE}=-5V, I_C=-500mA	20	-	-	
Gain Bandwidth Product		f_T	V_{CE}=-10V, I_C=-50mA	-	110	-	MHz
Output Capacitance		C_{ob}	V_{CB}=-10V, f=1MHz	-	30	-	pF
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-0.15	-0.4	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	I_C=-500mA, I_B=-50mA	-	-0.85	-1.2	V
Switching Time	Turn-on Time	t_{on}		-	80	-	nS
	Turn-off Time	t_{off}		-	100	-	
	Storage Time	t_{stg}		-	600	-	

Note : h_{FE}(1) Classification Y:100～200, GR:160～320

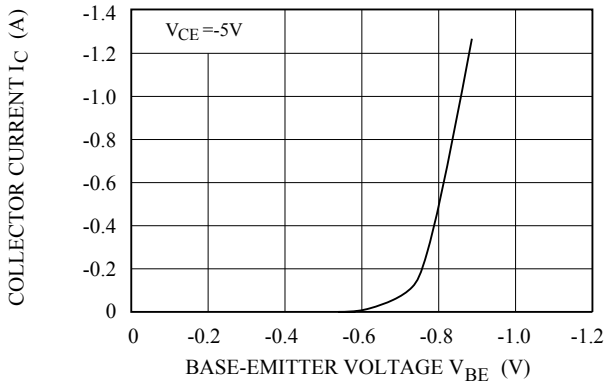
V_{CE} - I_C



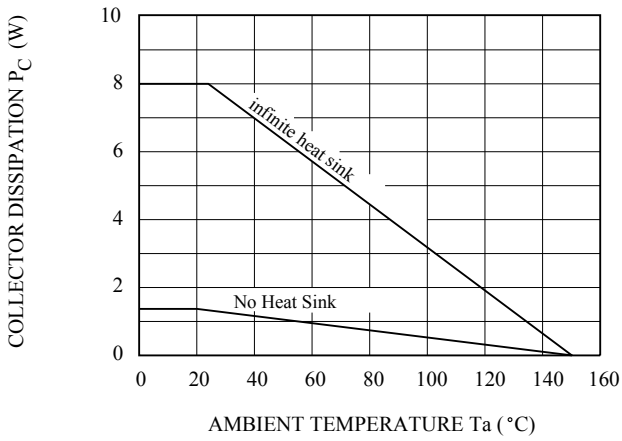
$V_{CE(sat)}$ - I_C



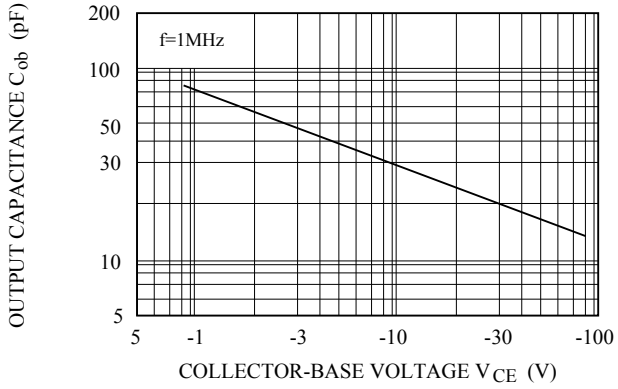
V_{BE} - I_C



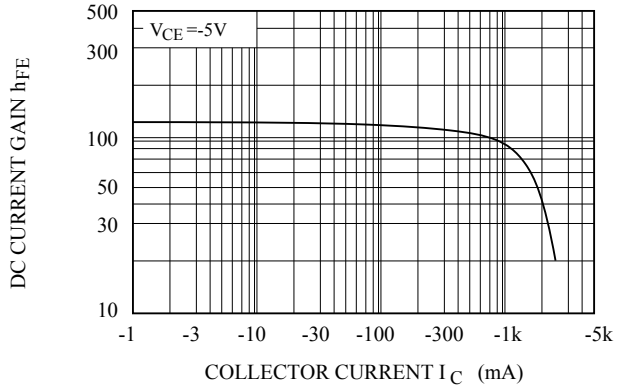
Pc - Ta



C_{ob} - V_{CB}



h_{FE} - I_C



A S O