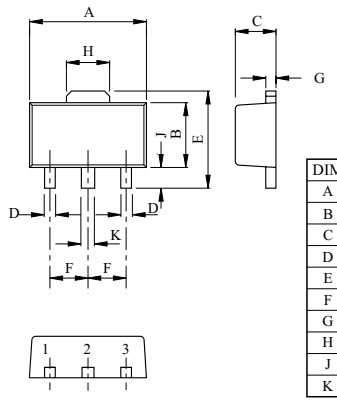
GENERAL PURPOSE APPLICATION.

FEATURES

· 1W (Mounted on Ceramic Substrate).
· Small Flat Package.
· Complementary to KTD1898.



DIM	MILLIMETERS
A	4.70 MAX
B	2.50±0.20
C	1.70 MAX
D	0.45+0.15/-0.10
E	4.25 MAX
F	1.50±0.10
G	0.40 TYP
H	1.75 MAX
J	0.75 MIN
K	0.5+0.10/-0.05

1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

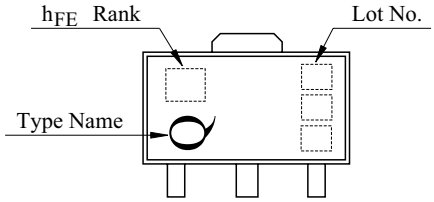
SOT-89

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-1	A
Emitter Current	I_E	1	A
Collector Power Dissipation	P_C	500	mW
	P_C*	1	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 ~ 150	℃

* Mounted on ceramic substrate(250mm² × 0.8t)

Marking

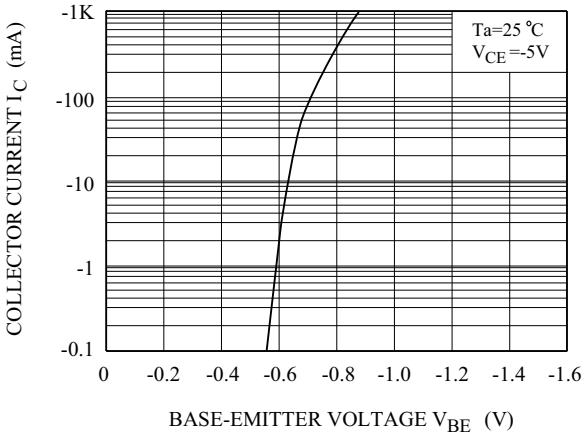


ELECTRICAL CHARACTERISTICS (Ta=25℃)

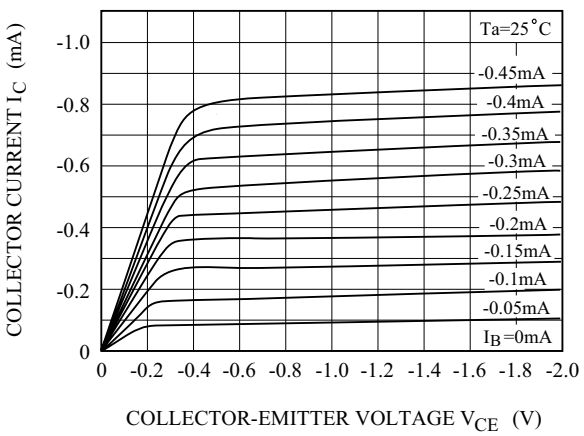
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-4V, I_C=0	-	-	-1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-80	-	-	V
DC Current Gain	h_{FE}(Note)	V_{CE}=-3V, I_C=-100mA	70	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-	-0.4	V
Transition Frequency	f_T	V_{CE}=-5V, I_C=-50mA, f=30MHz	-	100	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	25	-	pF

Note : h_{FE} Classification O:70 ~ 140, Y:120 ~ 240, GR:200 ~ 400

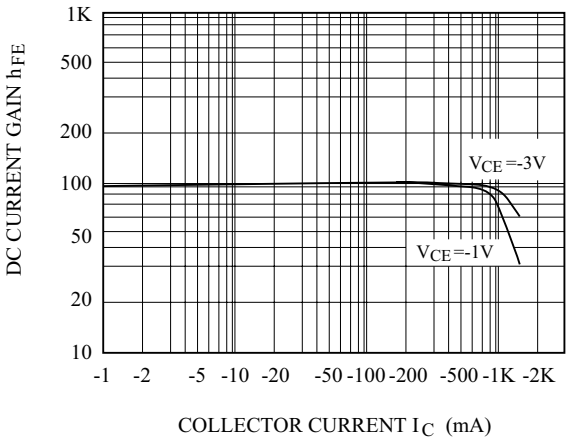
I_C - V_{BE}



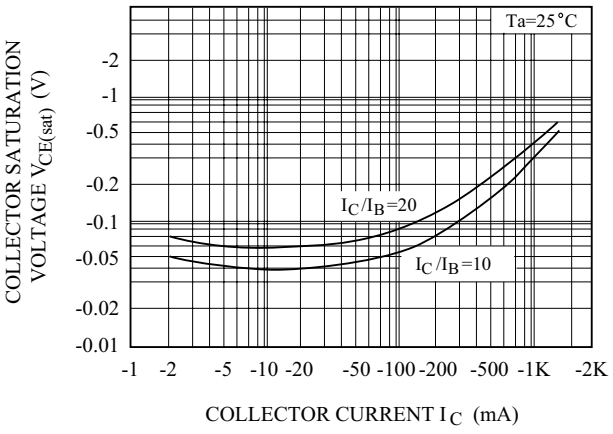
I_C - V_{CE}



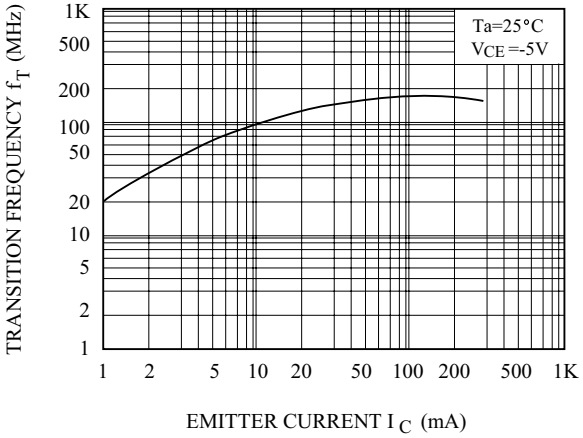
h_{FE} - I_C



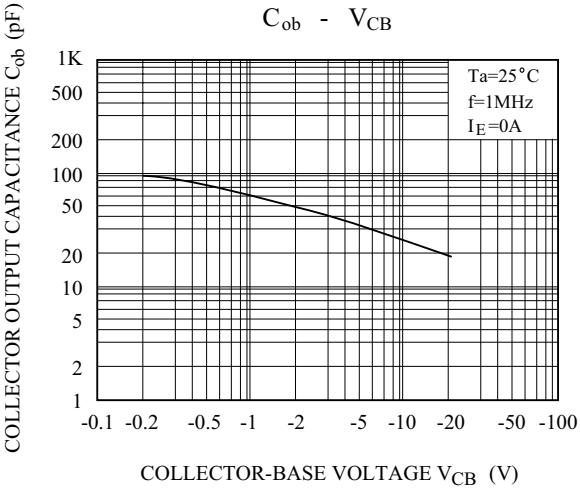
$V_{CE(sat)}$ - I_C



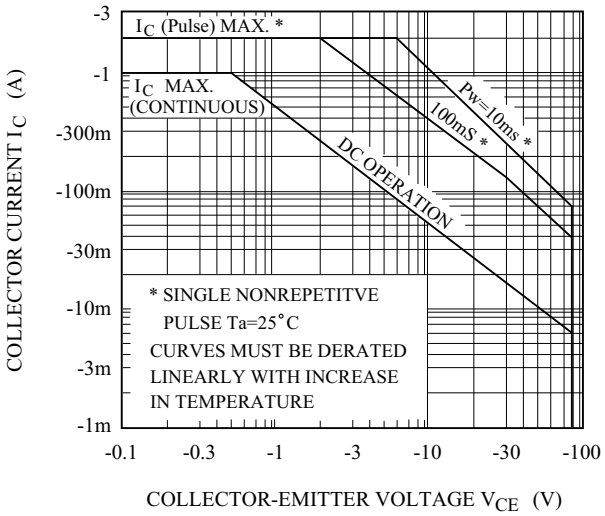
f_T - I_E



C_{ob} - V_{CB}



SAFE OPERATING AREA



Pc - Ta