

PMC

SINGAPORE

SILICON NPN TRIPLE DIFFUSED TYPE

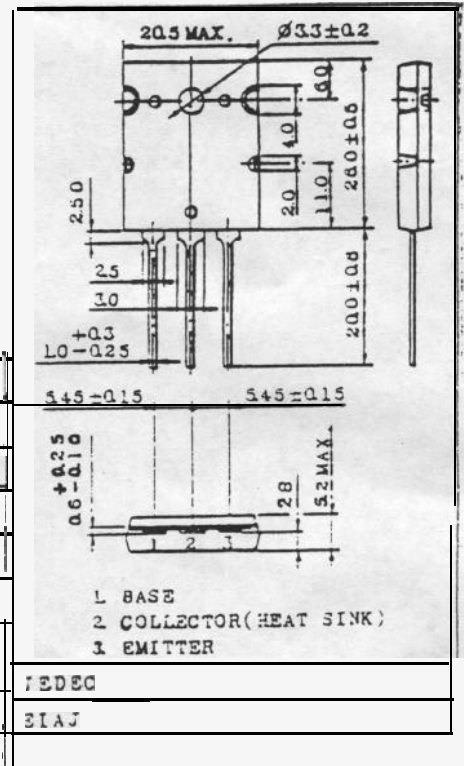
2SA1302

Unit in. mm

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Complementary to 2SC3281
- Recommend for 100 W High Fidelity Audio Frequency Amplifier Output Stage.



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-200	V
Collector-Emitter Voltage	V_{CE0}	-200	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-15	A
Base Current	I_B	-1.5	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	150	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

Weight : 9.75g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-200\text{V}, I_E=0$	-	-	-5.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$	-	-	-5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-50\text{mA}, I_B=0$	-200	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	55	-	160	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}, I_C=-8\text{A}$	35	60	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-10\text{A}, I_B=-1\text{A}$	-	-1.5	-3.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-5\text{V}, I_C=-8\text{A}$	-	-1.0	-1.5	V
Transition Frequency	f_T	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	-	25	-	MHZ
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$	-	470	-	pF

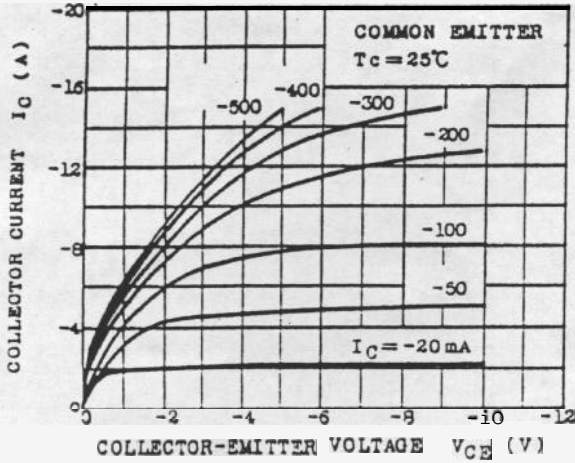
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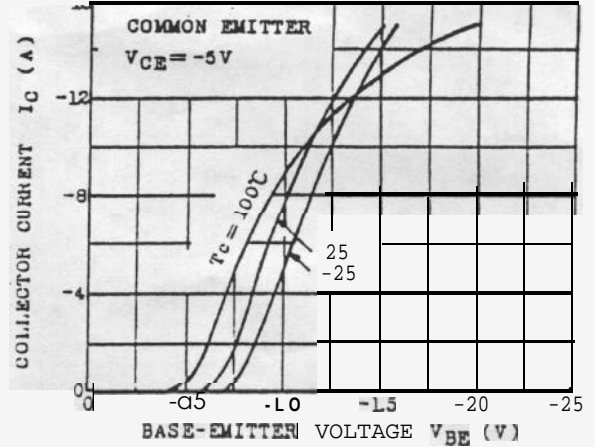
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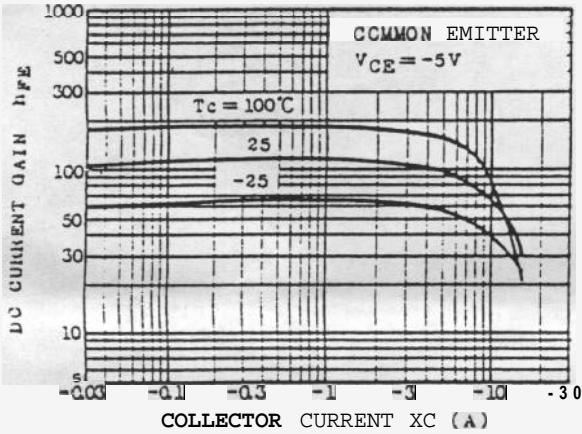
$I_C - V_{CE}$



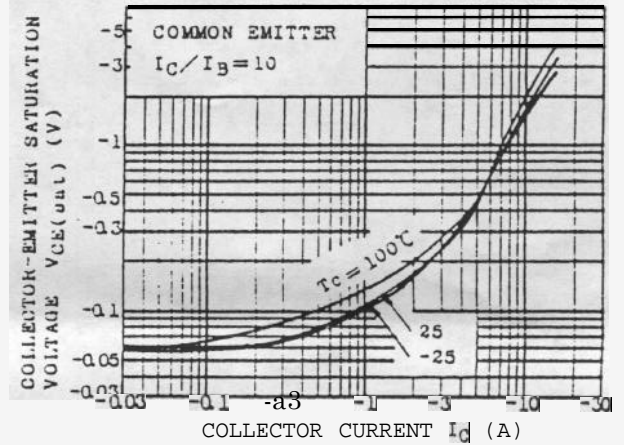
$I_C - V_{BE}$



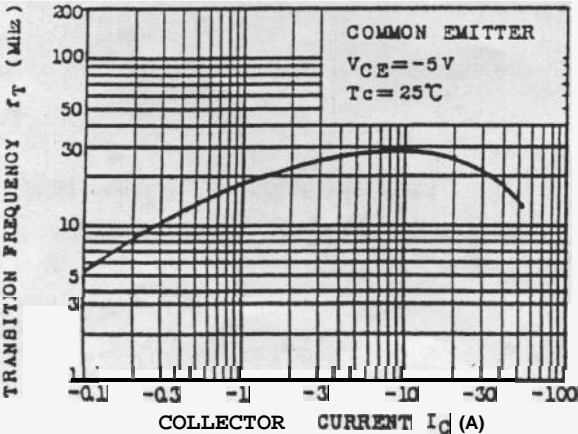
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$f_T - I_C$



SAFE OPERATING AREA

