2SC3280

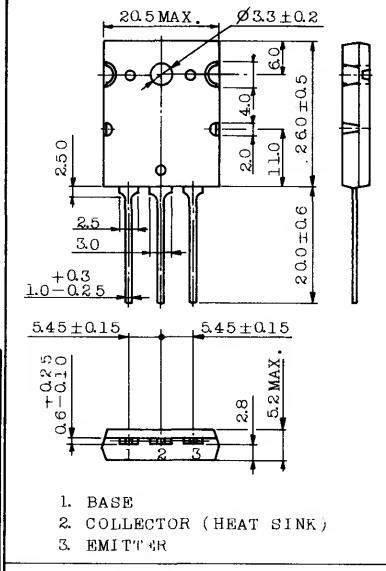
SILICON NPN TRIPLE DIFFUSED TYPE

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Complementary to 2SA1301
- Recommend for 80W High Fidelity Audio Frequency Amplifier Output Stage.

Unit in mm



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

JEDEC	—
EIAJ	—
TOSHIBA	2-21F1A

Weight : 9.75g

MAXIMUM RATINGS (Ta=25°C)

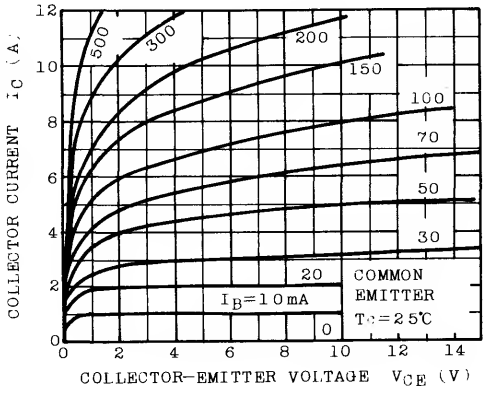
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	12	A
Base Current	I_B	1.2	A
Collector Power Dissipation (Tc=25°C)	P_C	120	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

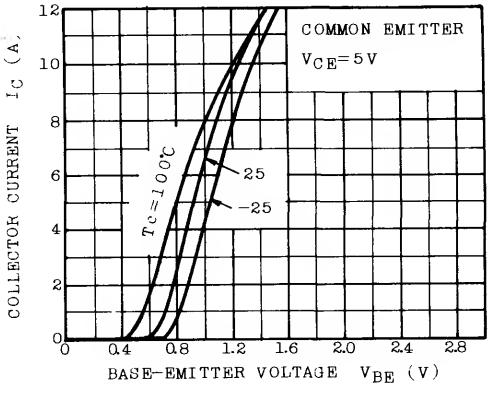
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=160V, I_E=0	-	-	5.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=50mA, I_B=0	160	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE}=5V, I_C=1A	55	-	160	
	$h_{FE(2)}$	V_{CE}=5V, I_C=6A	35	74	-	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=8A, I_B=0.8A	-	0.35	2.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=5V, I_C=6A	-	1.0	1.5	V
Transition Frequency	f_T	V_{CE}=5V, I_C=1A	-	30	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	220	-	pF

Note : $h_{FE(1)}$ Classification R : 55 ~ 110, O : 80 ~ 160

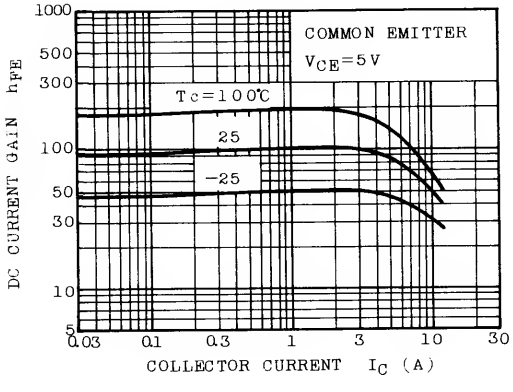
$I_C - V_{CE}$



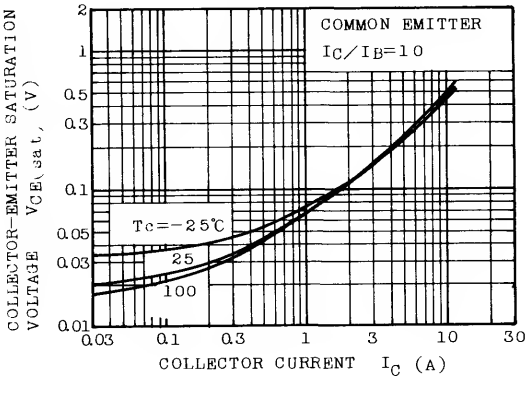
$I_C - V_{BE}$



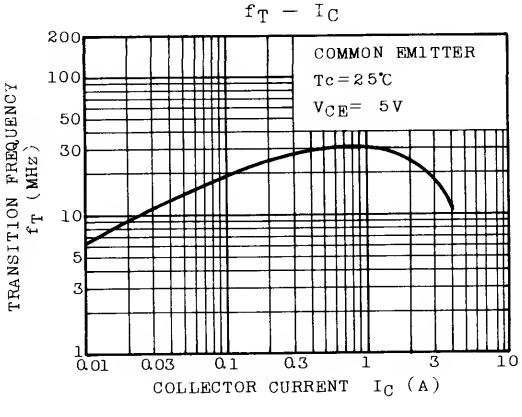
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$f_T - I_C$



SAFE OPERATING AREA