9097250 TOSHIBA (DISCRETE/OPTO) 56C 07289 D T-33-23

SILICON PNP TRIPLE DIFFUSED TYPE

2SA1265

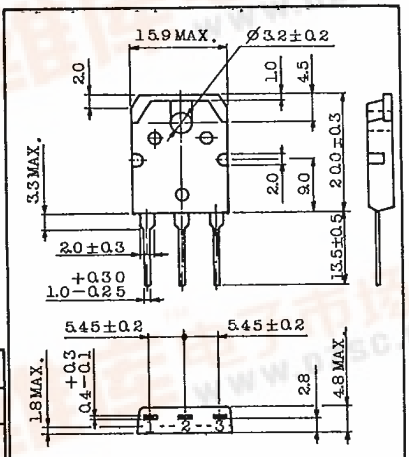
POWER AMPLIFIER APPLICATIONS.

FEATURES:

. Complementary to 2SC3182

. Recommend for 70W High Fidelity Audio Frequency Amplifier Output Stage

Unit in mm



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

JEDEC	—
EIAJ	—
TOSHIBA	2-16B1A

Weight : 4.6g

MAXIMUM RATINGS (Ta=25°C)

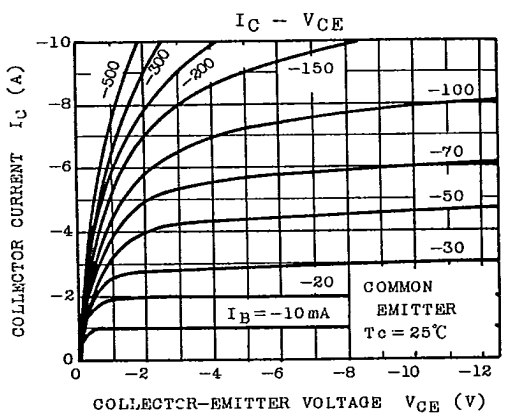
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-140	V
Collector-Emitter Voltage	V_{CEO}	-140	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-10	A
Base Current	I_B	-1	A
Collector Power Dissipation (Tc=25°C)	P_C	100	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

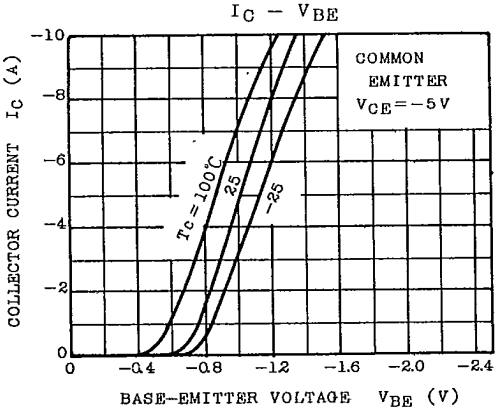
ELECTRICAL CHARACTERISTICS (Ta=25°C)

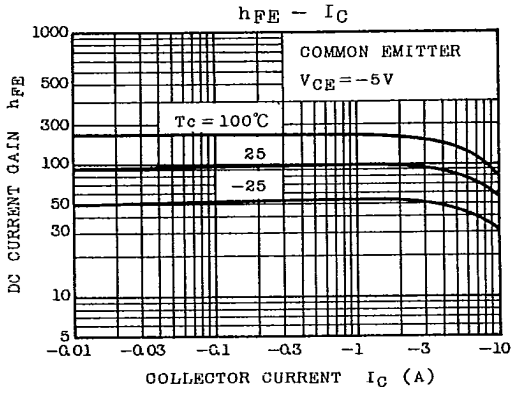
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-140V, I_E=0	-	-	-5.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-140	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE}=-5V, I_C=-1A	55	-	160	
	$h_{FE(2)}$	V_{CE}=-5V, I_C=-5A	35	83	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-7A, I_B=-0.7A	-	-0.8	-2.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-5V, I_C=-5A	-	-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	-	480	-	pF

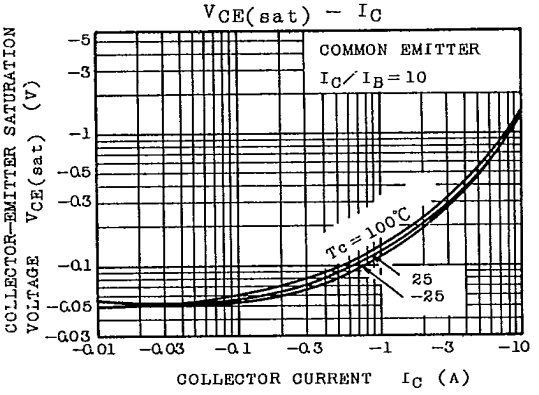
Note : $h_{FE(1)}$ Classification R : 55~110, O : 80~160

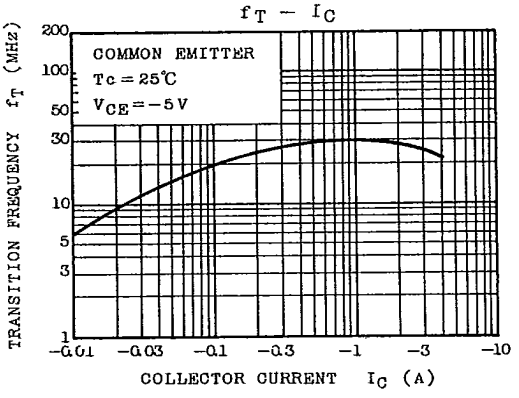
2SA1265

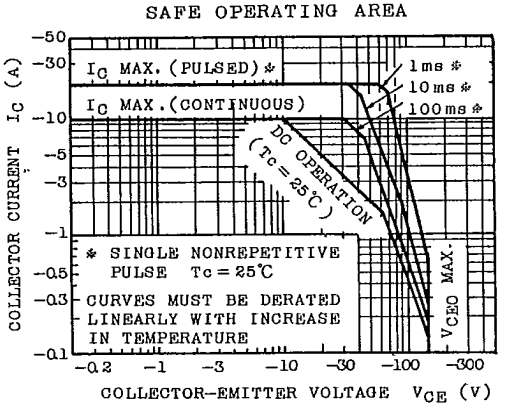

I_C – V_{CE}
COLLECTOR CURRENT I_C (A)
COLLECTOR–EMITTER VOLTAGE V_{CE} (V)
−500
−300
−200
−150
−100
−70
−50
−30
−20
I_B = −10 mA
COMMON EMITTER
Tc = 25°C


I_C – V_{BE}
COLLECTOR CURRENT I_C (A)
BASE–EMITTER VOLTAGE V_{BE} (V)
COMMON EMITTER
V_{CE} = −5 V
Tc = 100°C
25
−25


h_{FE} – I_C
DC CURRENT GAIN h_{FE}
COLLECTOR CURRENT I_C (A)
COMMON EMITTER
V_{CE} = −5 V
Tc = 100°C
25
−25


$V_{CE(sat)}$ – I_C
COLLECTOR–EMITTER SATURATION VOLTAGE $V_{CE(sat)}$ (V)
COLLECTOR CURRENT I_C (A)
COMMON EMITTER
I_C / I_B = 10
Tc = 100°C
25
−25


f_T – I_C
TRANSITION FREQUENCY f_T (MHz)
COLLECTOR CURRENT I_C (A)
COMMON EMITTER
Tc = 25°C
V_{CE} = −5 V


SAFE OPERATING AREA
COLLECTOR CURRENT I_C (A)
COLLECTOR–EMITTER VOLTAGE V_{CE} (V)
I_C MAX. (PULSED)*
I_C MAX. (CONTINUOUS)
1 ms *
10 ms *
100 ms *
DC OPERATION (Tc = 25°C)
* SINGLE NONREPETITIVE PULSE Tc = 25°C
CURVES MUST BE DERATED LINEARLY WITH INCREASE IN TEMPERATURE
V_{CEO} MAX.