

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07382

DT-33-19

2SB994

SILICON PNP TRIPLE DIFFUSED TYPE

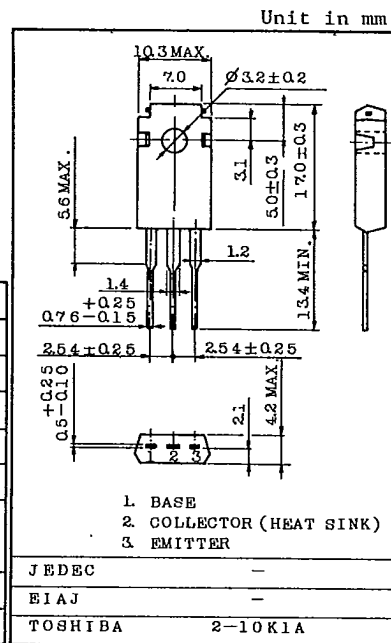
AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.0V(\text{Max.})$ at $I_C = -3A$, $I_B = -0.3A$
- Collector Power Dissipation : $P_C = 30W$ ($T_c = 25^\circ C$)
- Complementary to 2SD1354

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-60	V
Collector-Emitter Voltage		V_{CEO}	-60	V
Emitter-Base Voltage		V_{EBO}	-7	V
Collector Current		I_C	-3	A
Base Current		I_B	-0.5	A
Collector Power Dissipation	$T_a = 25^\circ C$	P_C	1.5	W
	$T_c = 25^\circ C$		30	
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ C$

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

Weight : 2.0g

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = -60V$, $I_E = 0$	-	-	-100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -7V$, $I_C = 0$	-	-	-100	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = -50mA$, $I_B = 0$	-60	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)		$V_{CE} = -5V$, $I_C = -0.5A$	60	-	200	-
	$h_{FE(2)}$		$V_{CE} = -5V$, $I_C = -3A$	20	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = -3A$, $I_B = -0.3A$	-	-0.5	-1.0	V
Base-Emitter Voltage		V_{BE}	$V_{CE} = -5V$, $I_C = -0.5A$	-	-0.7	-1.0	V
Transition Frequency		f_T	$V_{CE} = -5V$, $I_C = -0.5A$	-	9	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$	-	150	-	pF
Switching Time	Turn-on Time	t_{on}	INPUT I_{B1} I_{B2} OUTPUT I_C 20 μsec $-I_{B1} = I_{B2} = 0.2A$ DUTY CYCLE $\leq 1\%$ $V_{CE} = -30V$	-	0.4	-	μs
	Storage Time	t_{stg}		-	1.7	-	
	Fall Time	t_f		-	0.5	-	

Note : $h_{FE(1)}$ Classification 0 : 60 ~ 120, Y : 100 ~ 200

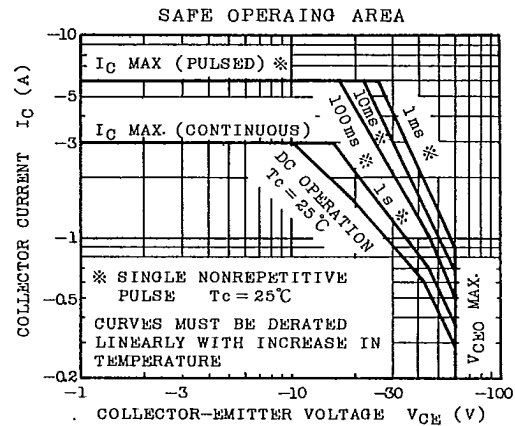
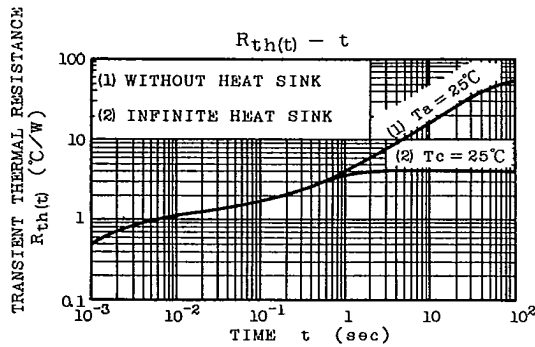
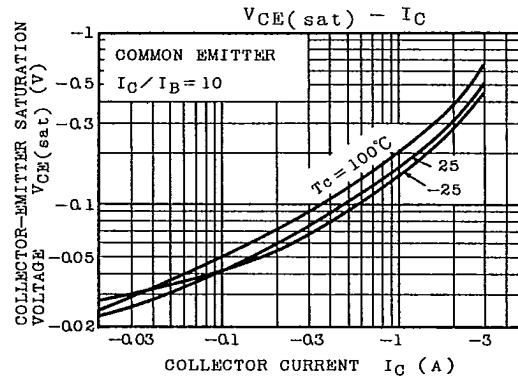
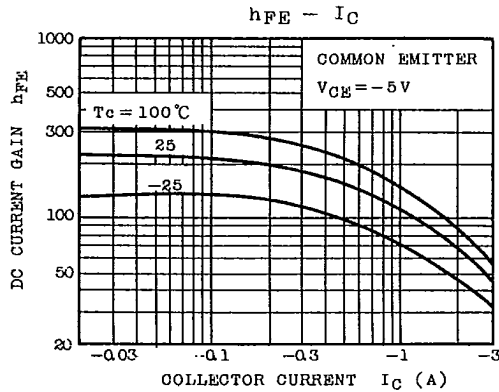
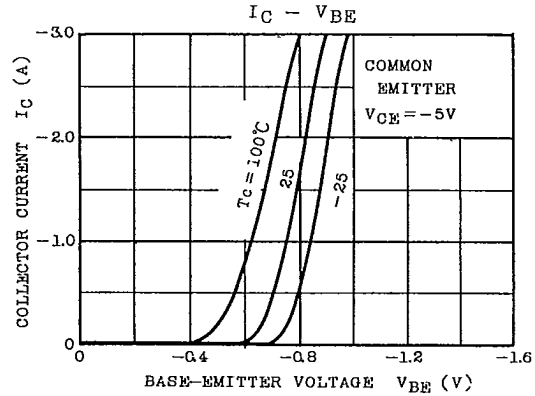
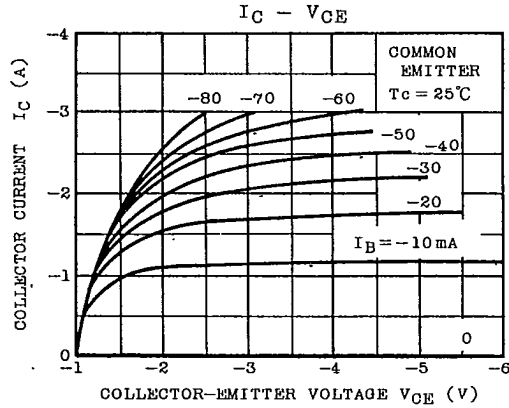
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