

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2SA1942

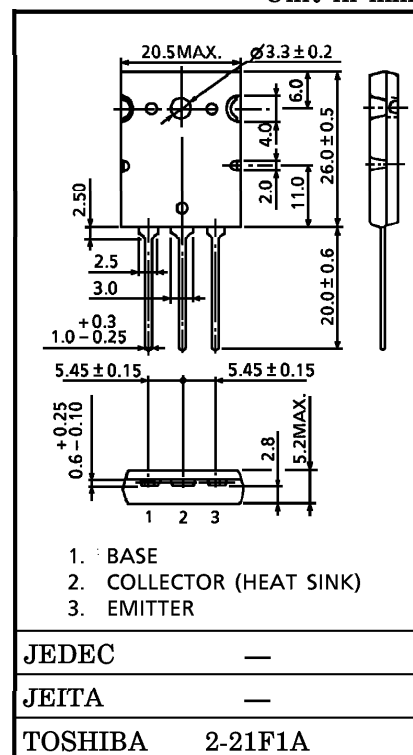
POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5199
- Recommend for 80 W High Fidelity Audio Frequency Amplifier Output Stage.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-160	V
Collector-Emitter Voltage	V_{CEO}	-160	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-12	A
Base Current	I_B	-1.2	A
Collector Power Dissipation ($T_c = 25^\circ\text{C}$)	P_C	120	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

Unit in mm

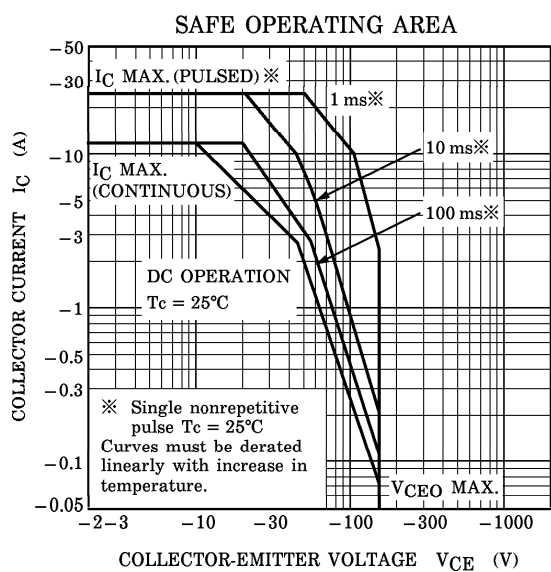
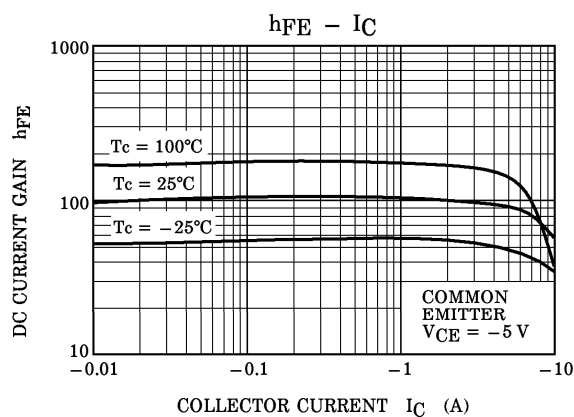
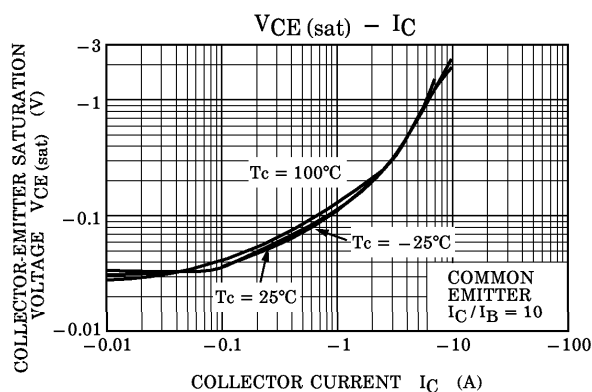
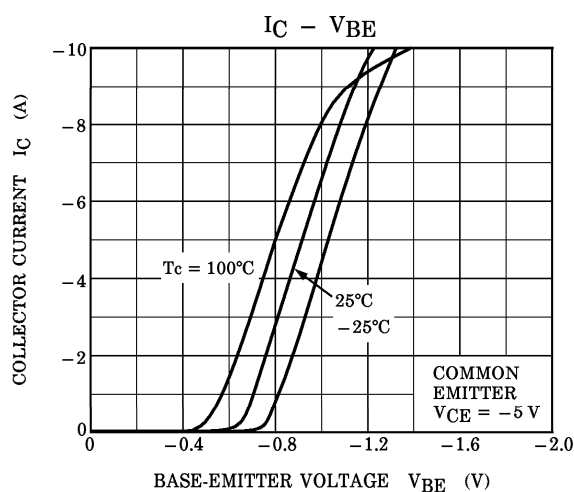
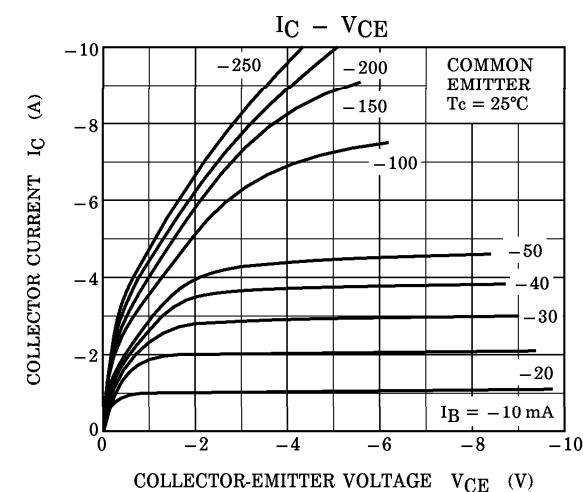


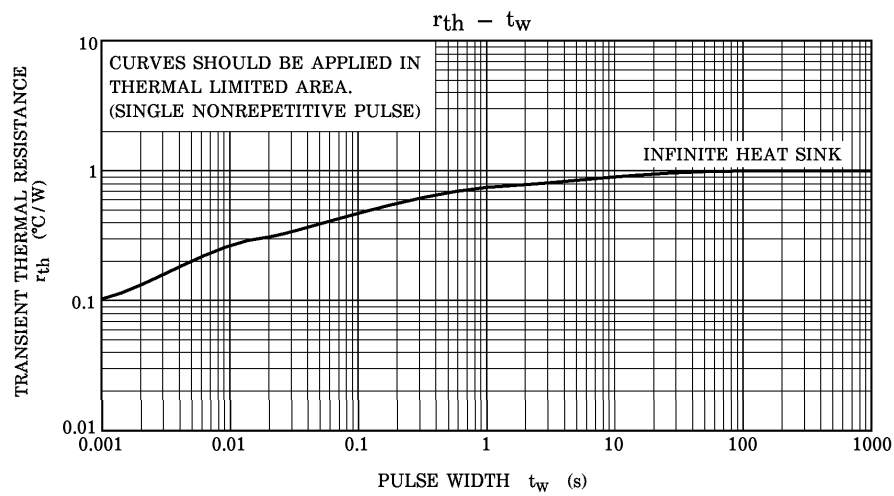
Weight : 9.75 g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -160\text{ V}, I_E = 0$	—	—	-5.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$	—	—	-5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50\text{ mA}, I_B = 0$	-160	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	55	—	160	
	$h_{FE(2)}$	$V_{CE} = -5\text{ V}, I_C = -6\text{ A}$	35	80	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -8\text{ A}, I_B = -0.8\text{ A}$	—	-1.1	-2.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -5\text{ V}, I_C = -6\text{ A}$	—	-1.0	-1.5	V
Transition Frequency	f_T	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	—	30	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0,$ $f = 1\text{ MHz}$	—	320	—	pF

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





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