

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1327A

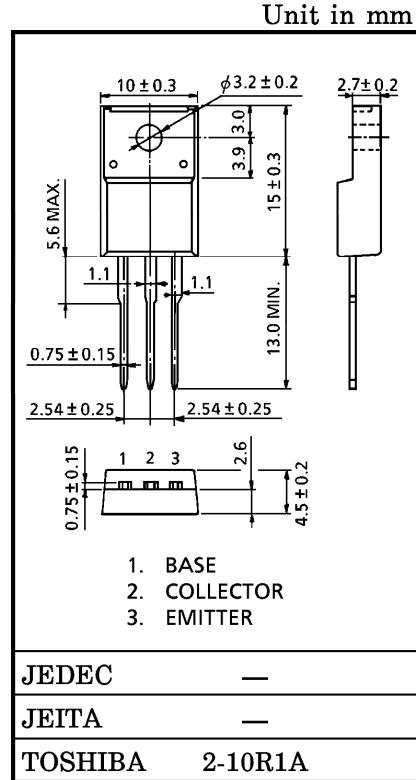
STROBE FLASH APPLICATIONS

AUDIO POWER AMPLIFIER APPLICATIONS

- High DC Current Gain : $h_{FE} = 70$ (min.)
($V_{CE} = -2V$, $I_C = -1A$)
- Low Collector Saturation Voltage : $V_{CE}(\text{sat}) = -0.5V$ (max.)
($I_C = -8A$, $I_B = -0.4A$)
- High Collector Power Dissipation : $P_C = 20W$ ($T_c = 25^\circ\text{C}$)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CB0}	-50	V
Collector-Emitter Voltage		V_{CEO}	-20	V
Emitter-Base Voltage		V_{EBO}	-8	V
Collector Current	DC	I_C	-10	A
	Pulse	I_{CP}	-20	
Base Current		I_B	-2	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	2.0	W
	$T_c = 25^\circ\text{C}$		20	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$

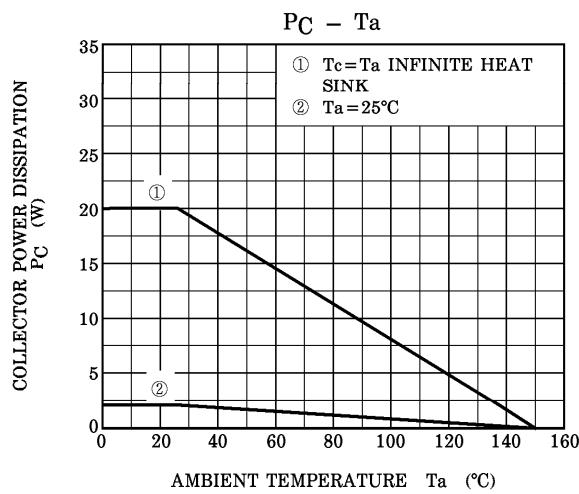
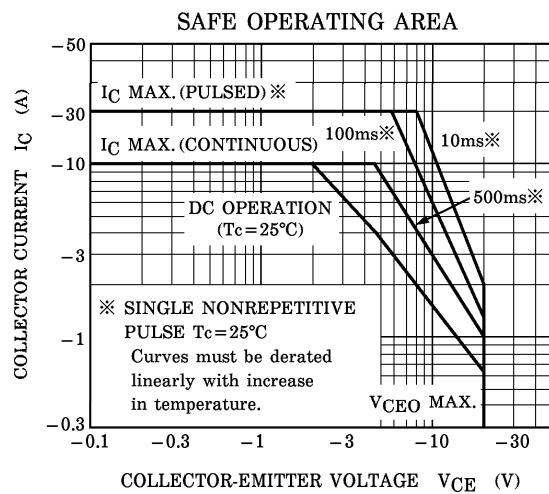
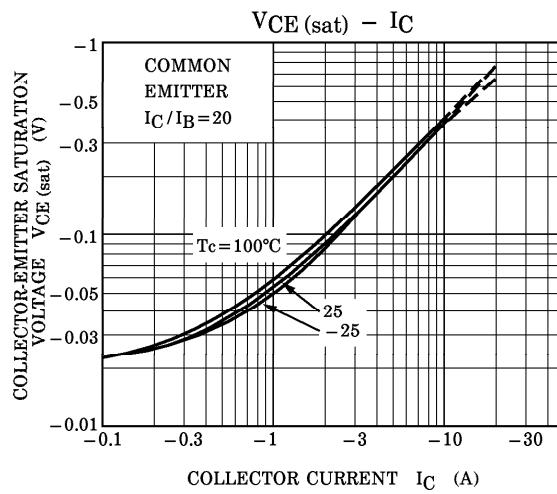
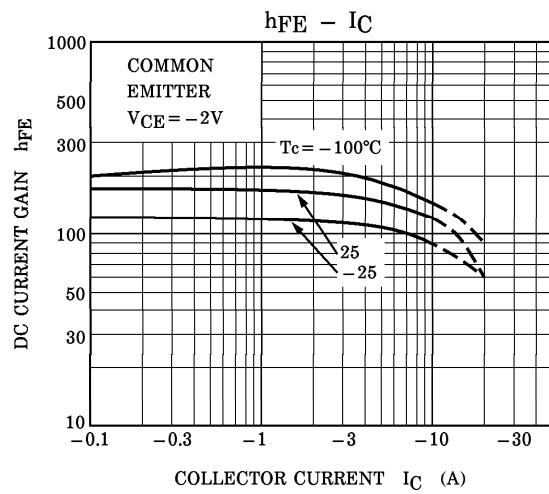
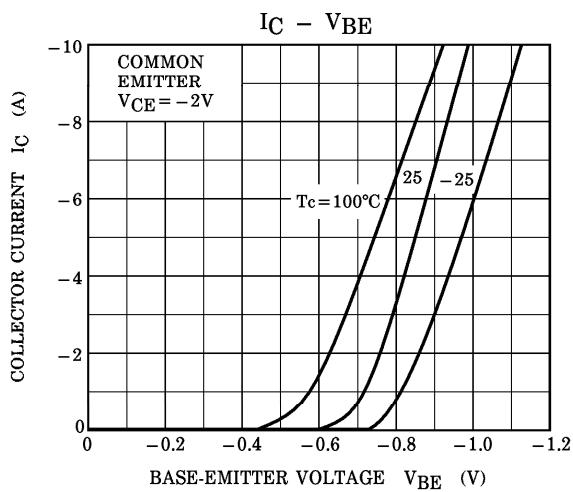
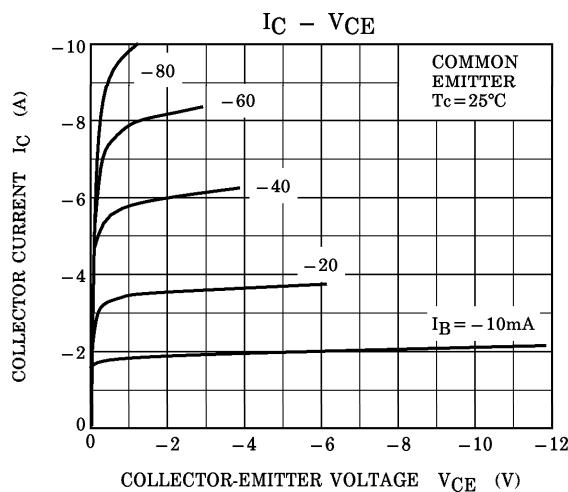


Weight : 1.7g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V$, $I_E = 0$	—	—	-1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -8V$, $I_C = 0$	—	—	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}$, $I_B = 0$	-20	—	—	V
DC Current Gain	h_{FE} (1) (Note)	$V_{CE} = -2V$, $I_C = -1A$	100	—	320	—
	h_{FE} (2)	$V_{CE} = -2V$, $I_C = -8A$	70	140	—	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = -8A$, $I_B = -0.4A$	—	-0.3	-0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V$, $I_C = -8A$	—	-0.95	-1.5	V
Transition Frequency	f_T	$V_{CE} = -2V$, $I_C = -1A$	—	45	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1\text{MHz}$	—	400	—	pF

(Note) : h_{FE} (1) Classification O : 100~200, Y : 160~320



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