

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC4935

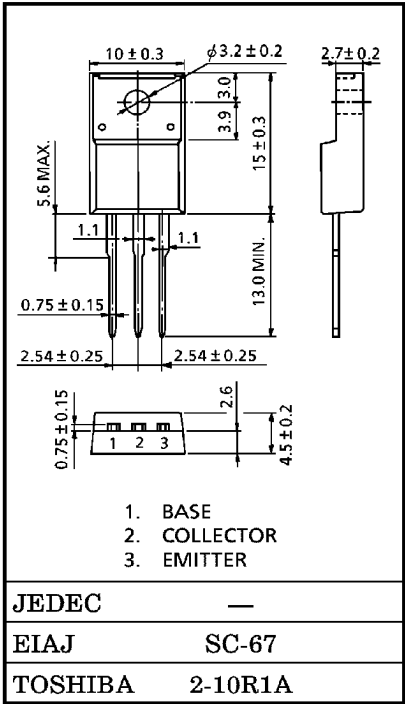
POWER AMPLIFIER APPLICATIONS

Unit in mm

- Good Linearity of h_{FE} .
- Complementary to 2SA1869 and 5 Watts Output Applications.

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	50	V
Collector-Emitter Voltage		V_{CEO}	50	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	3	A
Base Current		I_B	0.3	A
Collector Power Dissipation	$T_a = 25^{\circ}\text{C}$	P_C	2.0	W
	$T_c = 25^{\circ}\text{C}$		10	
Junction Temperature		T_j	150	$^{\circ}\text{C}$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^{\circ}\text{C}$



Weight : 1.7g

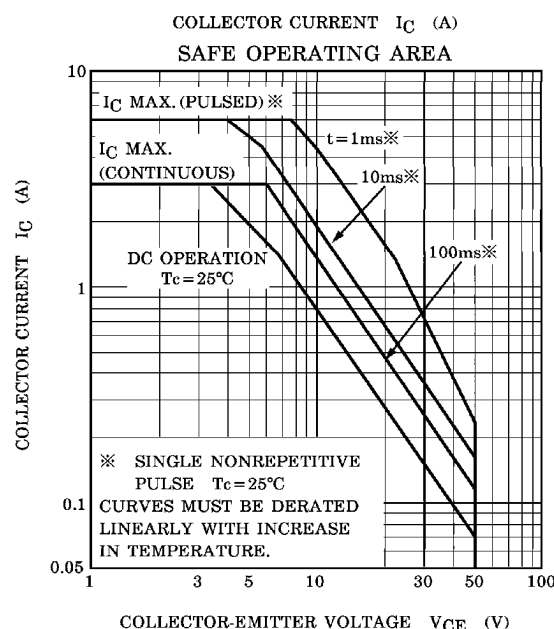
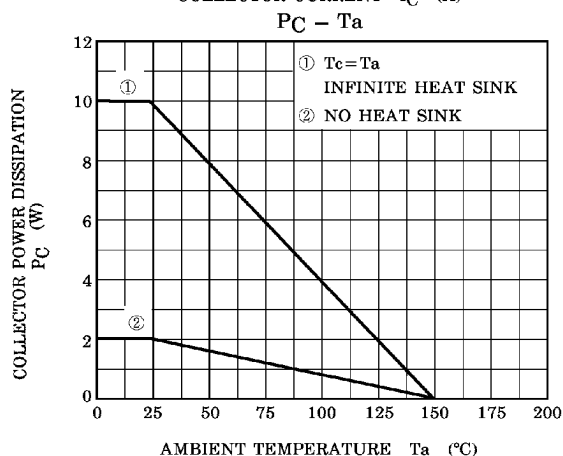
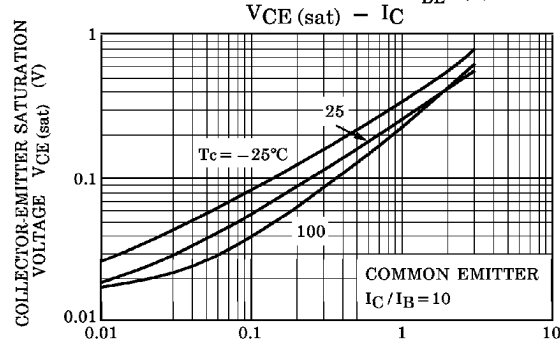
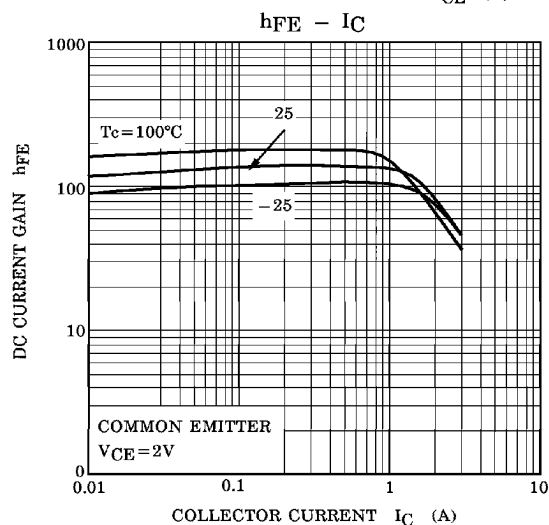
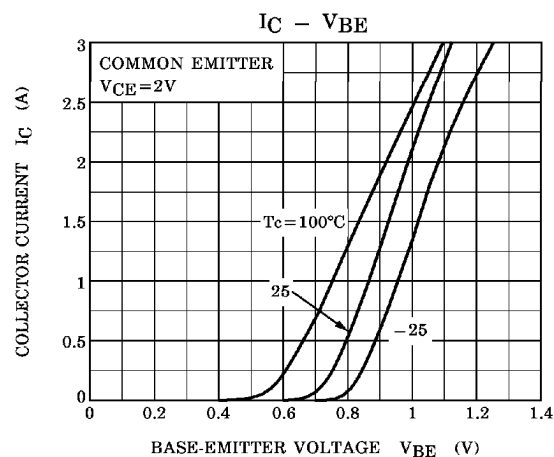
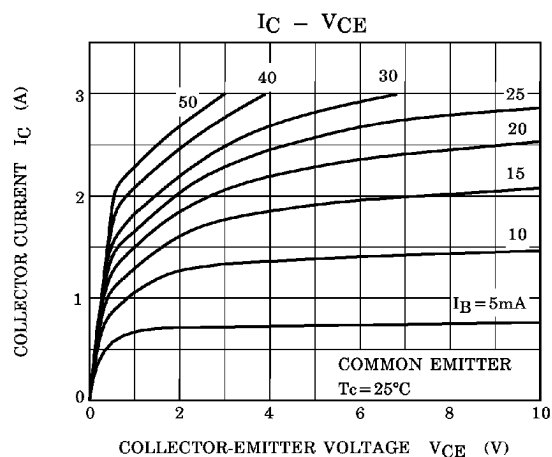
ELECTRICAL CHARACTERISTICS ($T_a = 25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 50\text{V}, I_E = 0$	—	—	1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	—	—	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = 10\text{mA}, I_B = 0$	50	—	—	V
DC Current Gain	$h_{FE} (1)$ (Note)	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	70	—	240	
	$h_{FE} (2)$	$V_{CE} = 2\text{V}, I_C = 2.5\text{A}$	30	—	—	
Collector-Emitter Saturation Voltage	$V_{CE (sat)}$	$I_C = 2\text{A}, I_B = 0.2\text{A}$	—	0.4	0.6	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	—	0.75	1.0	V
Transition Frequency	f_T	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	—	80	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	—	30	—	pF

Note : $h_{FE} (1)$ Classification O : 70~140, Y : 120~240

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