

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

2SC2073A

POWER AMPLIFIER APPLICATIONS

VERTICAL OUTPUT APPLICATIONS

- Wide Safe Operating Area.
- Complementary to 2SA940A

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

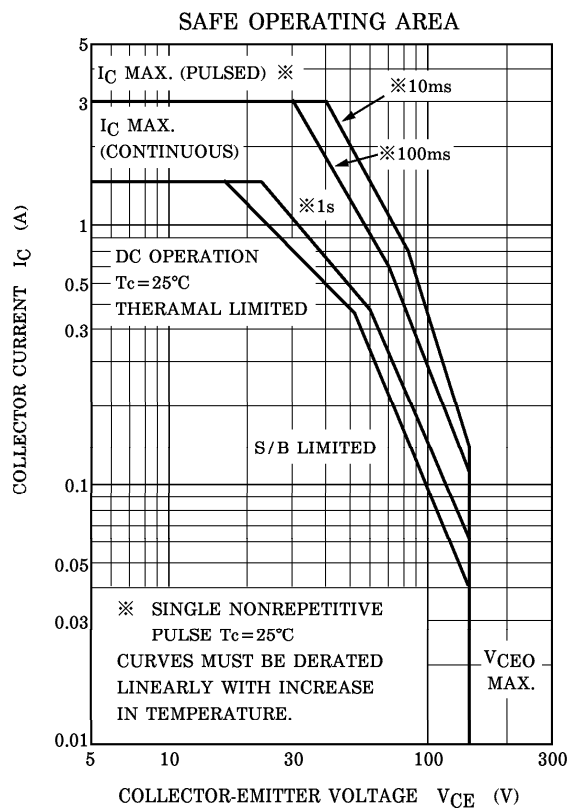
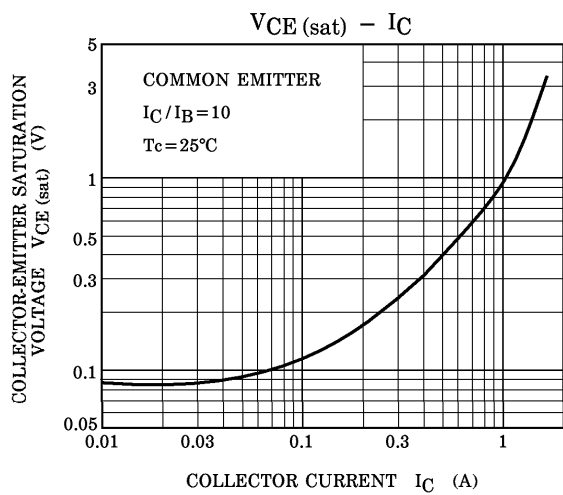
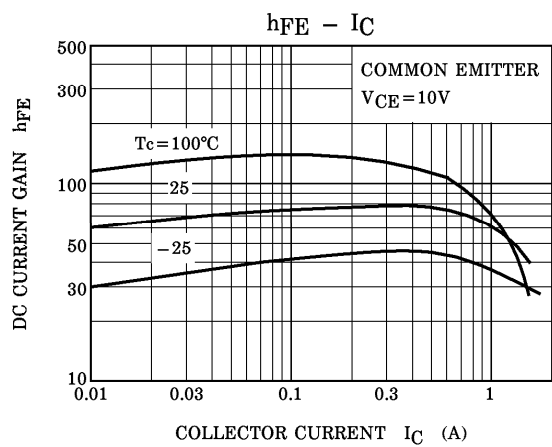
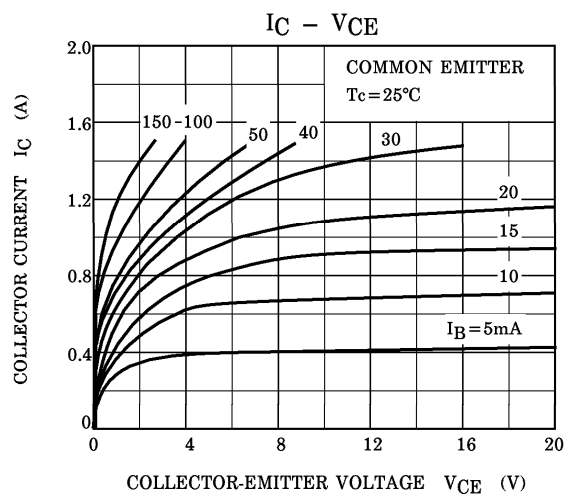
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	150	V
Collector-Emitter Voltage		V_{CEO}	150	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	1.5	A
Base Current		I_B	0.5	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	2.0	W
	$T_c = 25^\circ\text{C}$		25	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

Unit in mm	
JEDEC	—
JEITA	SC-67
TOSHIBA	2-10R1A

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}	$V_{CB} = 120\text{V}, I_E = 0$	—	—	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	—	—	10	μA
DC Current Gain	h_{FE}	$V_{CE} = 10\text{V}, I_C = 500\text{mA}$	40	75	140	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	—	—	1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 10\text{V}, I_C = 500\text{mA}$	0.65	0.75	0.85	V
Transition Frequency	f_T	$V_{CE} = 10\text{V}, I_C = 500\text{mA}$	—	4	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	—	35	—	pF



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