

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2SC2073A

POWER AMPLIFIER APPLICATIONS

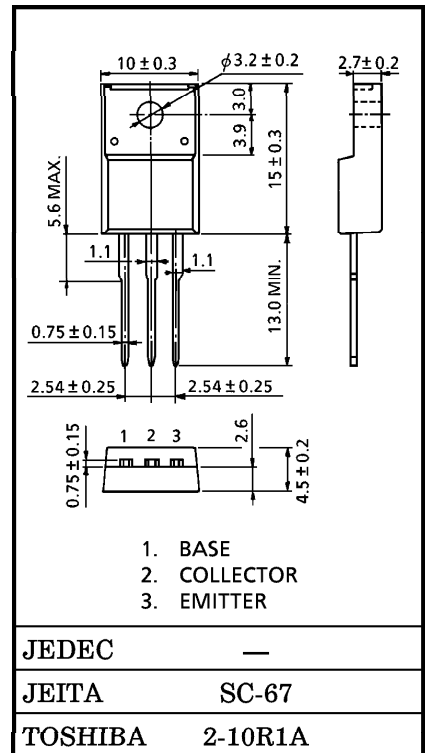
VERTICAL OUTPUT APPLICATIONS

- Wide Safe Operating Area.
- Complementary to 2SA940A

MAXIMUM RATINGS (T<sub>c</sub> = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V <sub>CB0</sub>	150	V
Collector-Emitter Voltage		V <sub>CEO</sub>	150	V
Emitter-Base Voltage		V <sub>EBO</sub>	5	V
Collector Current		I <sub>C</sub>	1.5	A
Base Current		I <sub>B</sub>	0.5	A
Collector Power Dissipation	T <sub>a</sub> = 25°C	P <sub>C</sub>	2.0	W
	T <sub>c</sub> = 25°C		25	
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55~150	°C

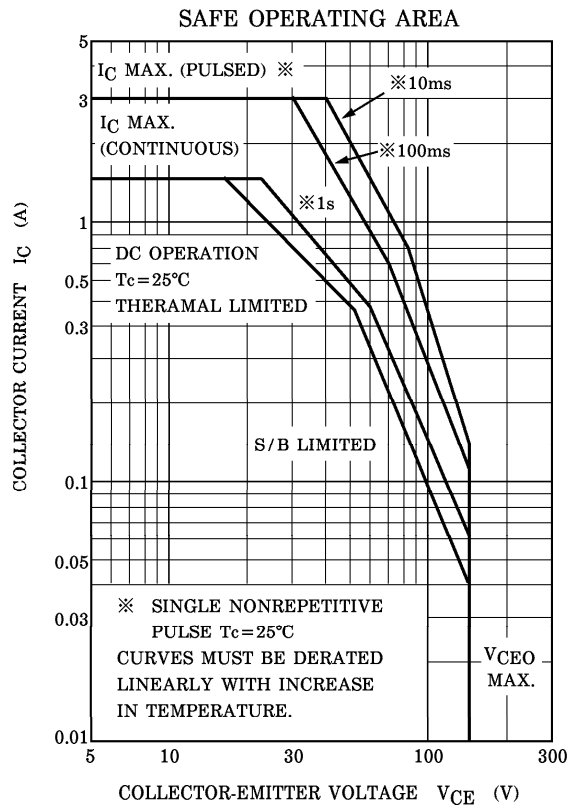
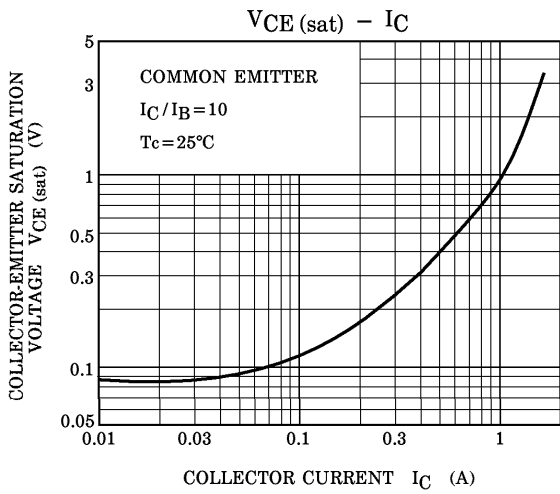
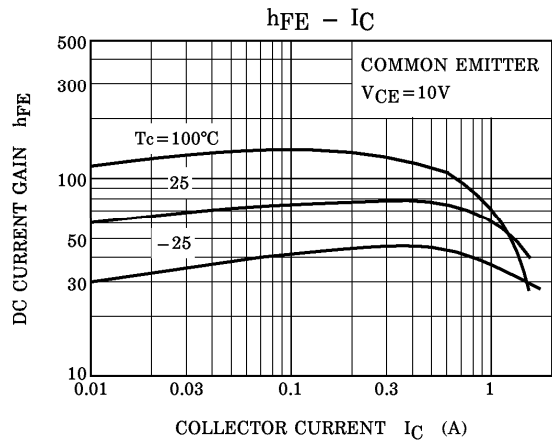
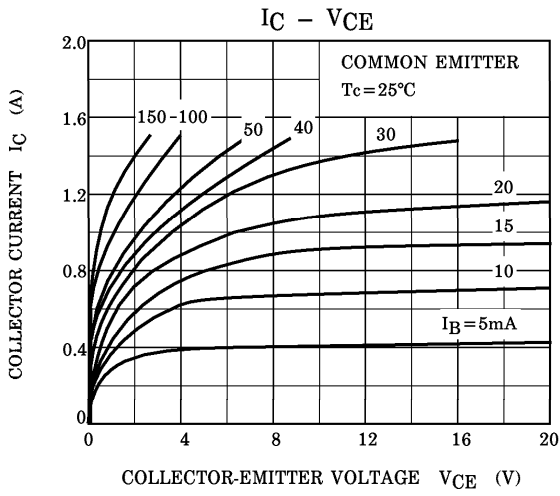
Unit in mm



Weight : 1.7g (Typ.)

ELECTRICAL CHARACTERISTICS (T<sub>c</sub> = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> = 120V, I <sub>E</sub> = 0	—	—	10	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0	—	—	10	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 500mA	40	75	140	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA	—	—	1.5	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 500mA	0.65	0.75	0.85	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 500mA	—	4	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	—	35	—	pF



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