

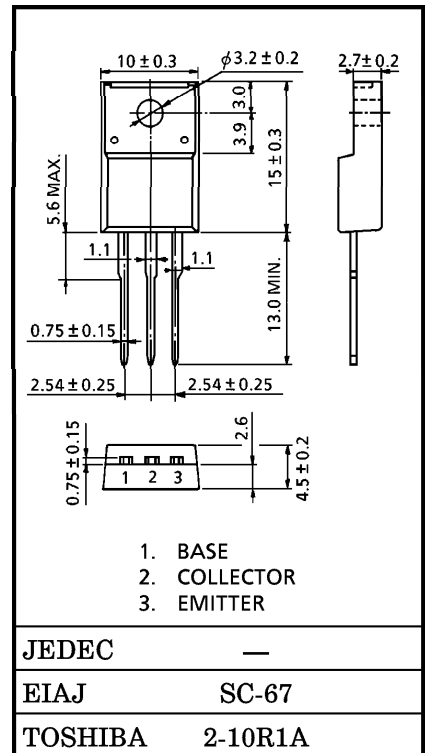
TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2SA940A

POWER AMPLIFIER APPLICATIONS  
VERTICAL OUTPUT APPLICATIONS

- Complementary to 2SC2073A

Unit in mm



**MAXIMUM RATINGS (Ta = 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	PC	Ta = 25°C	2.0
		Tc = 25°C	25
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C

JEDEC —

EIAJ SC-67

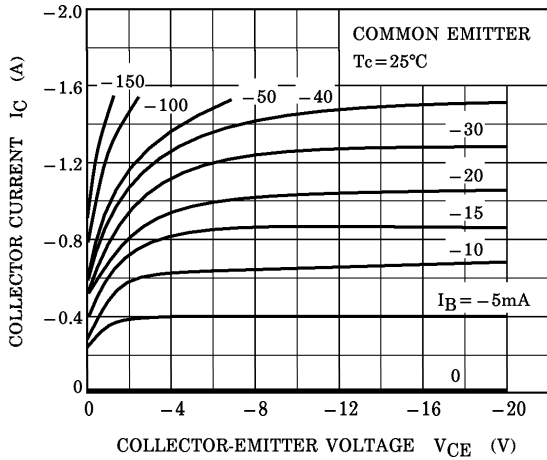
TOSHIBA 2-10R1A

Weight : 1.7g

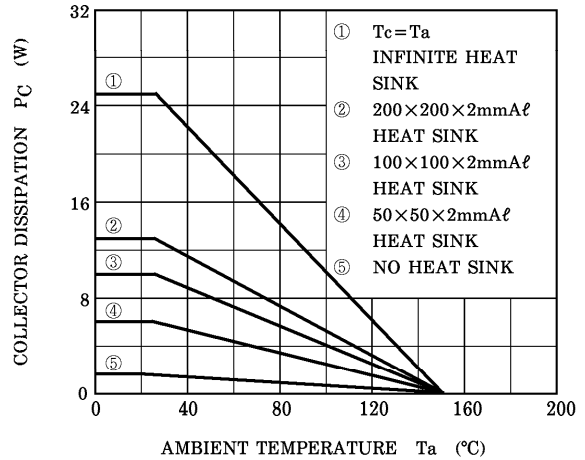
**ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</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	—	55	—	pF

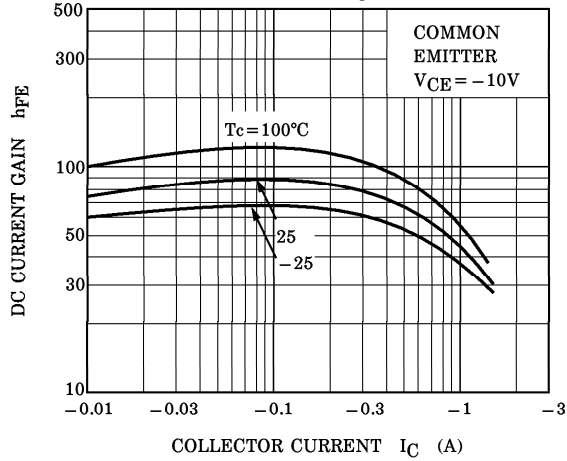
$I_C - V_{CE}$



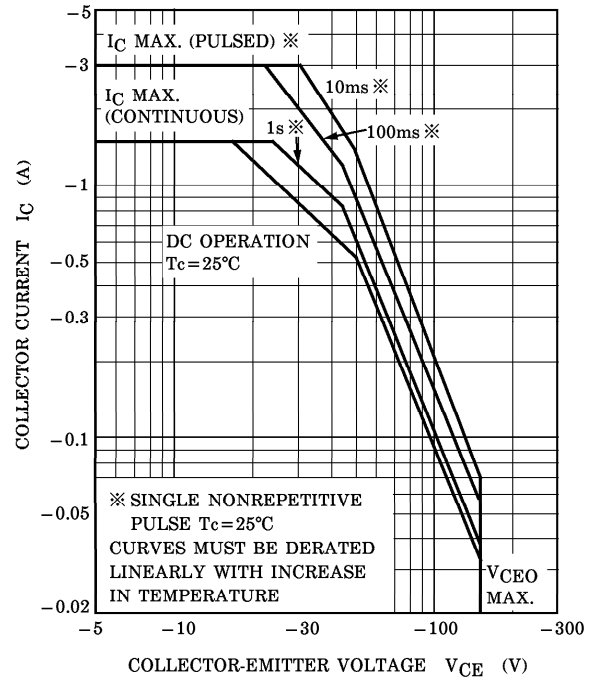
$P_C - T_a$



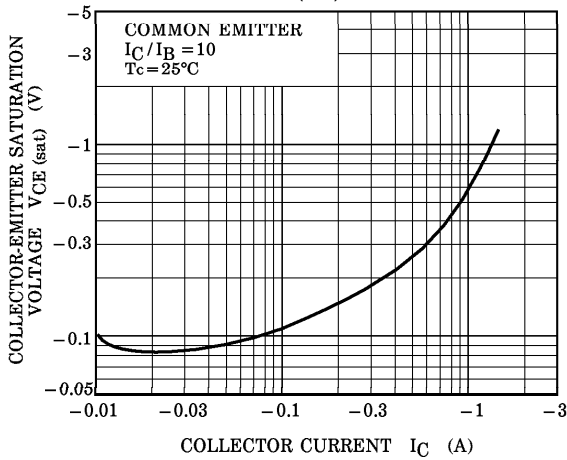
$h_{FE} - I_C$



SAFE OPERATING AREA



$V_{CE(sat)} - I_C$



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