

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

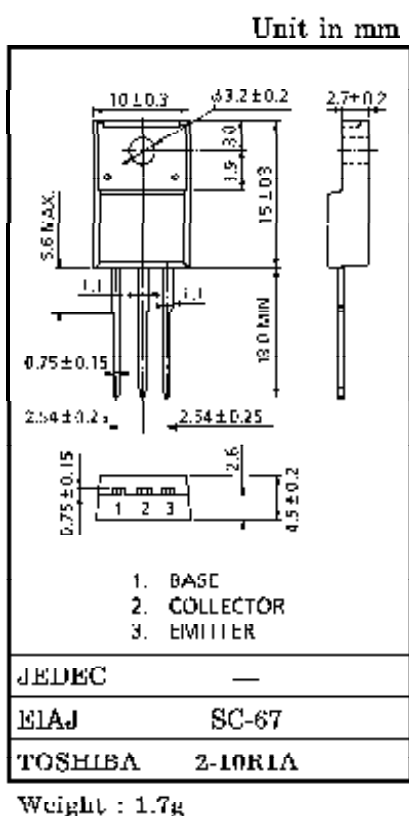
2SA940A

POWER AMPLIFIER APPLICATIONS
VERTICAL OUTPUT APPLICATIONS

- Complementary to 2SC2073A

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CB0}	-150	V
Collector-Emitter Voltage		V_{CE0}	-150	V
Emitter-Base Voltage		V_{EB0}	-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}	-55~150	$^{\circ}\text{C}$

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

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	$V_{CE}(\text{sat})$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	—	—	-1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -10\text{V}, I_C = -600\text{mA}$	-0.65	-0.76	-0.85	V
Transition Frequency	f_T	$V_{CE} = -10\text{V}, I_C = -500\text{mA}$	—	4	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	—	55	—	pF

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