

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

# 2SA1930

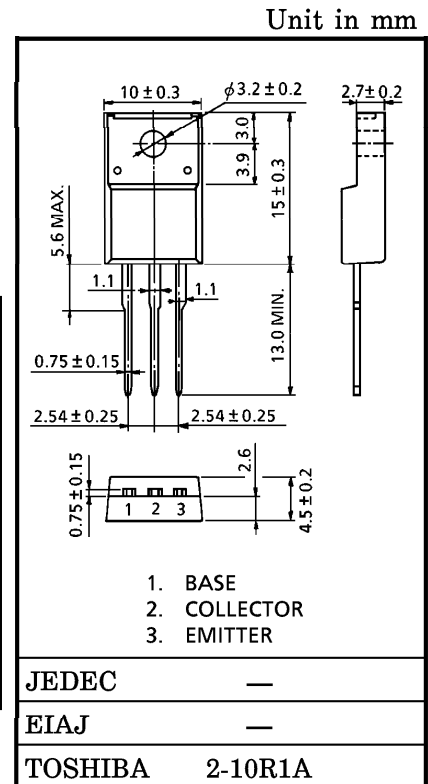
POWER AMPLIFIER APPLICATIONS

DRIVER STAGE AMPLIFIER APPLICATIONS

- High Transition Frequency :  $f_T = 200$  MHz (Typ.)
- Complementary to 2SC5171

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-180	V
Collector-Emitter Voltage	$V_{CE0}$	-180	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-2	A
Base Current	$I_B$	-1	A
Collector Power Dissipation	$P_C$	Ta = 25°C	2.0
		Tc = 25°C	20
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C



Weight : 1.7 g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -180$ V, $I_E = 0$	—	—	-5.0	$\mu$ A
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5$ V, $I_C = 0$	—	—	-5.0	$\mu$ A
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C = -10$ mA, $I_B = 0$	-180	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -5$ V, $I_C = -0.1$ A	100	—	320	
	$h_{FE(2)}$	$V_{CE} = -5$ V, $I_C = -1$ A	50	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1$ A, $I_B = -0.1$ A	—	-0.24	-1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5$ V, $I_C = -1$ A	—	-0.68	-1.5	V
Transition Frequency	$f_T$	$V_{CE} = -5$ V, $I_C = -0.3$ A	—	200	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10$ V, $I_E = 0$ , $f = 1$ MHz	—	26	—	pF

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