

**SEMICONDUCTOR**  
**TOSHIBA**  
TECHNICAL DATA

**TOSHIBA TRANSISTOR**  
**2SC3281**  
SILICON NPN TRIPLE DIFFUSED TYPE

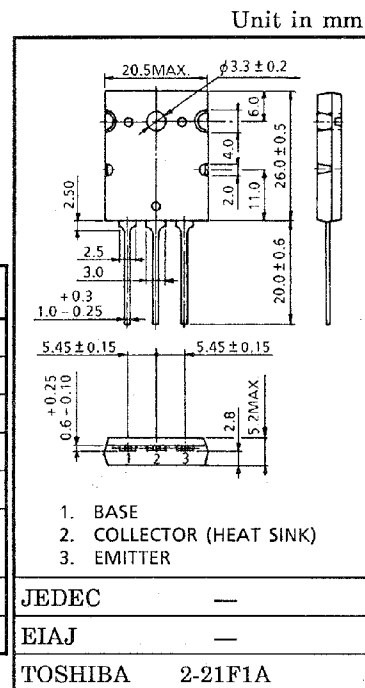
(2SC3281)

POWER AMPLIFIER APPLICATIONS.

- Complementary to 2SA1302
- Recommend for 100W High Fidelity Audio Frequency Amplifier Output Stage.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	200	V
Collector-Emitter Voltage	$V_{CE0}$	200	V
Emitter-Base Voltage	$V_{EB0}$	5	V
Collector Current	$I_C$	15	A
Base Current	$I_B$	1.5	A
Collector Power Dissipation ( $T_c = 25^\circ\text{C}$ )	$P_C$	150	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	$-55 \sim 150$	$^\circ\text{C}$



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

Weight : 9.75g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 200\text{V}, I_E = 0$	—	—	5.0	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$	—	—	5.0	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C = 50\text{mA}, I_B = 0$	200	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	55	—	160	
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 8\text{A}$	35	60	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{A}, I_B = 1\text{A}$	—	0.4	3.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = 5\text{V}, I_C = 8\text{A}$	—	1.0	1.5	V
Transition Frequency	$f_T$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	—	30	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	—	270	—	pF

Note :  $h_{FE(1)}$  Classification R : 55~110, O : 80~160

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1995-1-9  
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