### **Transistor**

# Silicon NPN Triple Diffused Type

# **Power Amplifier Applications**

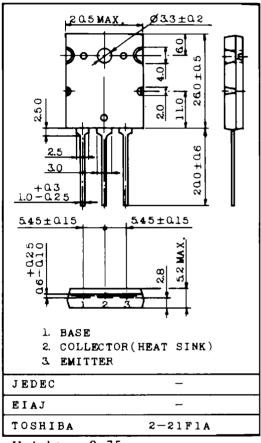
#### **Features**

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

## Absolute Maximum Ratings (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	V <sub>CBO</sub>	200	٧	
Collector-Emitter Voltage	V <sub>CEO</sub>	200	V	
Emitter-Base Voltage	V <sub>EBO</sub>	5	V	
Collector Current	lc	15	Α	
Base Current	IB	1.5	Α	
Collector PowerDissipation (Tc = 25°C)	P <sub>C</sub>	150	W	
Junction Temperature	Tj	150	°C	
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C	

### Unit in mm



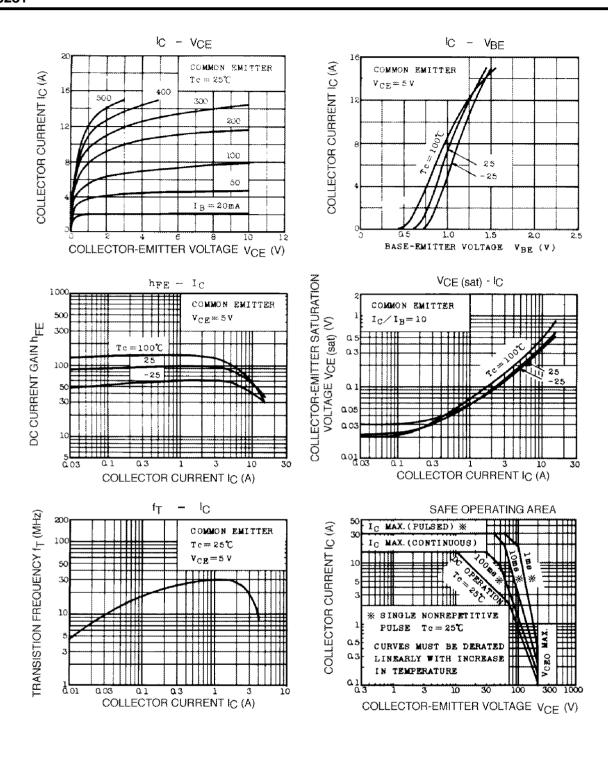
Weight: 9.75g

#### **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> = 200V, I <sub>E</sub> = 0	-	-	5.0	μΑ
Emitter Cut-off Current	I <sub>EBO</sub>	$V_{EB} = 5V, I_{C} = 0$	-	-	5.0	μA
Collector-Emitter Breakdown Voltage	V <sub>(BR) CEO</sub>	$I_C = 50 \text{mA}, I_B = 0$	200	-	-	V
DC Current Gain	h <sub>FE(1) (Note)</sub>	$V_{CE} = 5V$ , $I_C = 1mA$	55	-	160	
	h <sub>FE(2)</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 8A	35	60	-	
Saturation Voltage Collector-Emitter	V <sub>CE(sat)</sub>	$I_C = 10A, I_B = 1A$	-	0.40	3.0	V
Base-Emitter Voltage	V <sub>BE</sub>	$V_{CE} = 5V, I_{C} = 8A$	-	1.0	1.5	٧
Transition Frequency	f <sub>T</sub>	$V_{CE} = 5V, I_{C} = 1A$	-	30	-	MHz
Collector Output Capacitance	C <sub>ob</sub>	$V_{CB} = 10V, I_E = 0, f = 1MHz$	- 1	270	-	pF

Note:  $h_{FF}$  (1) Classification R : 0: 55 ~ 110, 0 : 80 ~ 160

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