



**2SD1047**

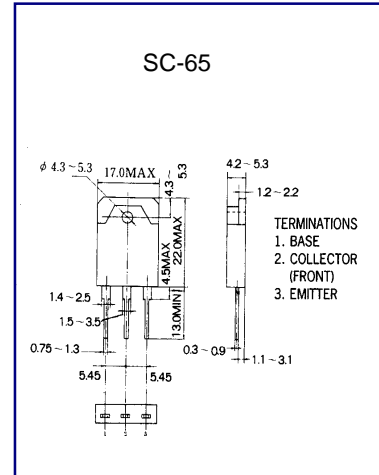
**NPN PLANAR SILICON TRANSISTOR**

**AUDIO POWER AMPLIFIER  
DC TO DC CONVERTER**

- High Current Capability
- High Power Dissipation
- Complementary to 2SB817

**ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	200	V
Collector-Emitter Voltage	V <sub>CE0</sub>	140	V
Emitter-Base voltage	V <sub>EBO</sub>	6	V
Collector Current (DC)	I <sub>C</sub>	10	A
Collector Dissipation	P <sub>C</sub>	100	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~150	°C



**ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>C</sub> =5 mA I <sub>E</sub> =0	200			V
Collector Emitter Breakdown Voltage	BV <sub>CE0</sub>	I <sub>C</sub> =10 mA R <sub>BE</sub> =∞	140			V
Emitter Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =5mA I <sub>C</sub> =0	6			V
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =100V I <sub>E</sub> =0			0.1	mA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V I <sub>C</sub> =0			0.1	mA
*DC Current Gain	h <sub>FE1</sub>	V <sub>CE</sub> =5V I <sub>C</sub> =1A	55		160	
DC Current Gain	h <sub>FE2</sub>	V <sub>CE</sub> =5V I <sub>C</sub> =5A	50			
Collector- Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =5A I <sub>B</sub> =0.5A			2.0	V