



# 2SC2578

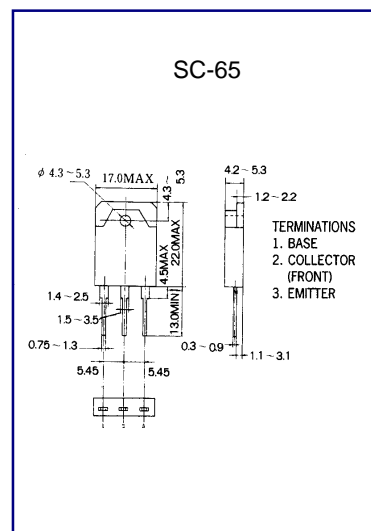
# NPN PLANAR SILICON TRANSISTOR

## AUDIO POWER AMPLIFIER DC TO DC CONVERTER

- High Current Capability
- High Power Dissipation
- Complementary to 2SA1104

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	140	V
Collector-Emitter Voltage	V <sub>CE0</sub>	100	V
Emitter-Base voltage	V <sub>EB0</sub>	6	V
Collector Current (DC)	I <sub>C</sub>	7	A
Collector Dissipation	P <sub>C</sub>	70	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	140			V
Collector Emitter Breakdown Voltage	BV <sub>CE0</sub>	I <sub>C</sub> =10 mA R <sub>BE</sub> =∞	100			V
Emitter Base Breakdown Voltage	BV <sub>EB0</sub>	I <sub>E</sub> =5 mA 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>EB0</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> =3A	50			
Collector- Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =3A I <sub>B</sub> =0.3A			2.0	V