



2SB688

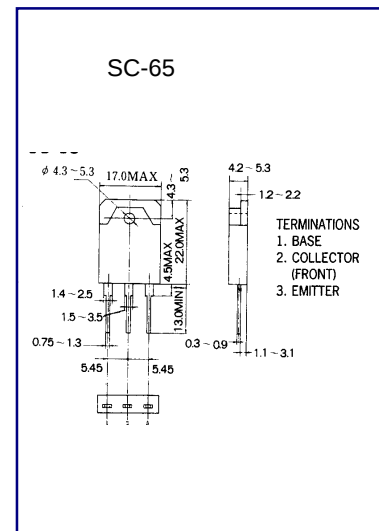
## PNP PLANAR SILICON TRANSISTOR

### AUDIO POWER AMPLIFIER DC TO DC CONVERTER

- High Current Capability
- High Power Dissipation
- Complementary to 2SD718

### ABSOLUTE MAXIMUM RATING (Ta=25°C)

| Characteristic            | Symbol | Rating  | Unit |
|---------------------------|--------|---------|------|
| Collector-Base Voltage    | VCBO   | -160    | V    |
| Collector-Emitter Voltage | VCEO   | -120    | V    |
| Emitter-Base voltage      | VEBO   | -6      | V    |
| Collector Current (DC)    | IC     | -8      | A    |
| Collector Dissipation     | PC     | 80      | W    |
| Junction Temperature      | Tj     | 150     | °C   |
| Storage Temperature       | Tstg   | -55~150 | °C   |



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

| Characterristic                       | Symbol   | Test Condition          | Min  | Typ | Max  | Unit |
|---------------------------------------|----------|-------------------------|------|-----|------|------|
| Collector Base Breakdown Voltage      | BVCBO    | IC=-5 mA IE=0           | -160 |     |      | V    |
| Collector Emitter Breakdown Voltage   | BVCEO    | IC=-10 mA               | -120 |     |      | V    |
| Emitter Base Breakdown Voltage        | BVEBO    | RBE=∞                   | -6   |     |      | V    |
| Collector Cutoff Current              | ICBO     | IE=-5mA IC=0            |      |     | -0.1 | mA   |
| Emitter Cutoff Current                | IEBO     | VCB=-60V IE=0           |      |     | -0.1 | mA   |
| *DC Current Gain                      | hFE1     | VEB=-4V IC=0            | 55   |     | 160  |      |
| DC Current Gain                       | hFE2     | VCE=-5V IC=-1A          | 50   |     |      |      |
| Collector- Emitter Saturation Voltage | VCE(sat) | VCE=-5V IC=-3A IB=-0.3A |      |     | -1.5 | V    |