



Micro Commercial Components  
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## 2SA1943

### Features

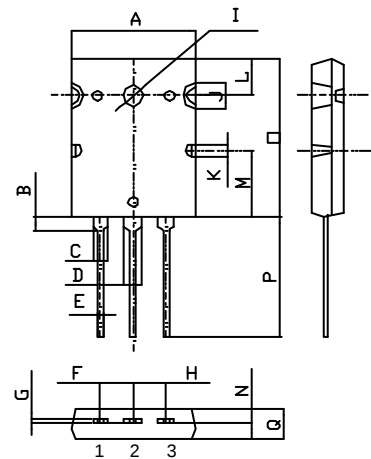
- Silicon PNP triple diffused type
- Complementary to 2SC5200
- Recommended for 100W high fidelity audio frequency amplifier output stage

### Maximum Ratings

| Symbol    | Rating                      | Rating      | Unit |
|-----------|-----------------------------|-------------|------|
| $V_{CEO}$ | Collector-Emitter Voltage   | 230         | V    |
| $V_{CBO}$ | Collector-Base Voltage      | 230         | V    |
| $V_{EBO}$ | Emitter-Base Voltage        | 5.0         | V    |
| $I_C$     | Collector Current           | 15          | A    |
| $P_C$     | Collector power dissipation | 150         | W    |
| $T_J$     | Junction Temperature        | -55 to +150 | °C   |
| $T_{STG}$ | Storage Temperature         | -55 to +150 | °C   |

### PNP Silicon Power Transistors

#### TO-3PL



PIN 1. BASE  
PIN 2. COLLECTOR ( HEAT SINK )  
PIN 3. EMITTER

### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|--------|-----------|-----|-----|-------|
|--------|-----------|-----|-----|-------|

#### OFF CHARACTERISTICS

|               |                                                                 |     |     |         |
|---------------|-----------------------------------------------------------------|-----|-----|---------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage<br>( $I_C=50mA$ , $I_E=0$ ) | 230 | --- | Vdc     |
| $I_{CBO}$     | Collector-Base Cutoff Current<br>( $V_{CB}=230Vdc$ , $I_E=0$ )  | --- | 5.0 | $\mu A$ |
| $I_{EBO}$     | Emitter-Base Cutoff Current<br>( $V_{EB}=5.0Vdc$ , $I_C=0$ )    | --- | 5.0 | $\mu A$ |

#### ON CHARACTERISTICS

|               |                                                                     |     |     |     |
|---------------|---------------------------------------------------------------------|-----|-----|-----|
| $h_{FE-1}$    | Forward Current Transfer ratio<br>( $I_C=1.0A$ , $V_{CE}=5.0Vdc$ )  | 55  | 160 | --- |
| $h_{FE-2}$    | Forward Current Transfer ratio<br>( $I_C=7.0A$ , $V_{CE}=5.0Vdc$ )  | 35  | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage<br>( $I_C=8.0A$ , $I_E=0.8A$ ) | --- | 3.0 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage<br>( $I_C=7.0A$ , $V_{CE}=5.0Vdc$ ) | --- | 1.5 | Vdc |

#### DIMENSIONS

| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | ---    | .807  | ---   | 20.50 |      |
| B   |        | .098  |       | 2.50  |      |
| C   |        | .098  |       | 2.50  |      |
| D   |        | .118  |       | 3.00  |      |
| E   | .039   | .051  | .75   | 1.30  |      |
| F   | .209   | .220  | 5.30  | 5.60  |      |
| G   | .020   | .033  | .50   | .85   |      |
| H   | .209   | .220  | 5.30  | 5.60  |      |
| I   | .126   | .142  | 3.20  | 3.60  | Ø    |
| J   |        | .157  |       | 4.00  |      |
| K   |        | .079  |       | 2.00  |      |
| L   |        | .236  |       | 6.00  |      |
| M   |        | .433  |       | 11.00 |      |
| N   |        | .110  |       | 2.80  |      |
| O   | 1.004  | 1.043 | 25.50 | 26.50 |      |
| P   | .764   | .811  | 19.40 | 20.60 |      |
| Q   | ---    | .205  | ---   | 5.20  |      |