

## KSA928A

## PNP EPITAXIAL SILICON TRANSISTOR

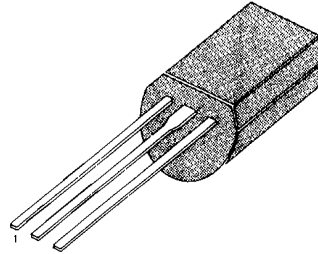
### AUDIO POWER AMPLIFIER

- Complement to KSC2328A
- Collector Dissipation  $P_C=1W$
- 3 Watt Output Application

### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ C$ )

| Characteristic            | Symbol    | Rating     | Unit       |
|---------------------------|-----------|------------|------------|
| Collector-Base Voltage    | $V_{CBO}$ | -30        | V          |
| Collector-Emitter Voltage | $V_{CEO}$ | -30        | V          |
| Emitter-Base Voltage      | $V_{EBO}$ | -5         | V          |
| Collector Current         | $I_C$     | -2         | A          |
| Collector Dissipation     | $P_C$     | 1          | W          |
| Junction Temperature      | $T_J$     | 150        | $^\circ C$ |
| Storage Temperature       | $T_{STG}$ | -55 ~ +150 | $^\circ C$ |

TO-92L



1. Emitter 2. Collector 3. Base

### ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ C$ )

| Characteristic                       | Symbol        | Test Conditions                          | Min | Typ | Max  | Unit |
|--------------------------------------|---------------|------------------------------------------|-----|-----|------|------|
| Collector-Base Breakdown Voltage     | $BV_{CBO}$    | $I_C = -100 \mu A, I_E = 0$              | -30 |     |      | V    |
| Collector-Emitter Breakdown Voltage  | $BV_{CEO}$    | $I_C = -10 mA, I_B = 0$                  | -30 |     |      | V    |
| Emitter-Base Breakdown Voltage       | $BV_{EBO}$    | $I_E = -1 mA, I_C = 0$                   | -5  |     |      | V    |
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB} = -30 V, I_E = 0$                |     |     | -100 | nA   |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB} = -5 V, I_C = 0$                 |     |     | -100 | nA   |
| DC Current Gain                      | $h_{FE}$      | $V_{CE} = -2 V, I_C = -500 mA$           | 100 |     | 320  |      |
| Base-Emitter On Voltage              | $V_{BE(ON)}$  | $V_{CE} = -2 V, I_C = -500 mA$           |     |     | -1.0 | V    |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -1.5 A, I_B = -30 mA$             |     |     | -2.0 | V    |
| Output Capacitance                   | $C_{OB}$      | $V_{CB} = -10 V, I_E = 0$<br>$f = 1 MHz$ |     | 48  |      | pF   |
| Current Gain Bandwidth Product       | $f_T$         | $V_{CE} = -2 V, I_C = -500 mA$           |     | 120 |      | MHz  |

### $h_{FE}$ CLASSIFICATION

| Classification | O       | Y       |
|----------------|---------|---------|
| $h_{FE}$       | 100-200 | 160-320 |

