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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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KSB794/795

Audio Frequency Power Amplifier

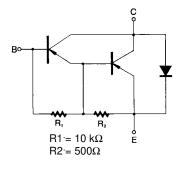
• Low Speed Switching Industrial Use



PNP Epitaxial Silicon Darlington Transistor

Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|------------------|--|------------|-------|
| V _{CBO} | Collector-Base Volage | | |
| | : KSB794 | - 60 | V |
| | : KSB795 | - 80 | V |
| V _{CEO} | Collector-Emitter Volage | | |
| | : KSB794 | - 60 | V |
| | : KSB795 | - 80 | V |
| V _{EBO} | Emitter-Base Voltage | - 8 | V |
| I _C | Collector Current (DC) | - 1.5 | Α |
| I _{CP} | *Collector Current (Pulse) | - 3 | Α |
| I _B | Base Current (DC) | - 0.15 | Α |
| P _C | Collector Dissipation (T _a =25°C) | 1 | W |
| P _C | Collector Dissipation (T _C =25°C) | 10 | W |
| TJ | Junction Temperature | 150 | °C |
| T _{STG} | Storage Temperature | - 55 ~ 150 | °C |



Electrical Characteristics $T_C=25\,^{\circ}\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|-----------------------|--|---|------|-------|-------|
| I _{CBO} | Collector Cut-off Current | $V_{CB} = -60V, I_{E} = 0$ | | - 10 | μА |
| I _{CER} | Collector Cut-off Current | $V_{CE} = -60V$, $R_{BE} = 51\Omega$ @ $T_{C} = 125$ °C | | - 1 | mA |
| I _{CEX1} | Collector Cut-off Current | $V_{CE} = -60V, V_{BE} (off) = 1.5V$ | | - 10 | μА |
| I _{CEX2} | Collector Cut-off Current | $V_{CE} = -60V, V_{BE} \text{ (off)} = 1.5V$ @ $T_{C} = 125^{\circ}\text{C}$ | | -1 | mA |
| I _{EBO} | Emitter Cut-off Current | $V_{EB} = -5V, I_{C} = 0$ | | - 1 | mA |
| h _{FE1} | * DC Current Gain | $V_{CE} = -2V, I_{C} = -0.5A$ | 1000 | | |
| h _{FE2} | | $V_{CE} = -2V, I_{C} = -1A$ | 2000 | 30000 | |
| V _{CE} (sat) | * Collector-Emitter Saturation Voltage | I _C = - 1A, I _B = - 1mA | | -1.5 | V |
| V _{BE} (sat) | * Base-Emitter Saturation Voltage | $I_C = -1A, I_B = -1mA$ | | - 2 | V |

^{*} Pulse Test: PW≤350μs, Duty Cycle≤2% Pulsed.

h_{FE} Classificntion

| Classification | R | 0 | Υ |
|------------------|-------------|--------------|--------------|
| h _{FE2} | 2000 ~ 5000 | 4000 ~ 10000 | 8000 ~ 30000 |

^{*} PW≤300μs, Duty Cycle≤10%

Typical Characteristics

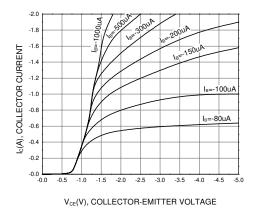


Figure 1. Static Characteristic

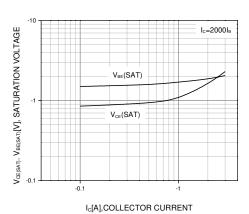


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

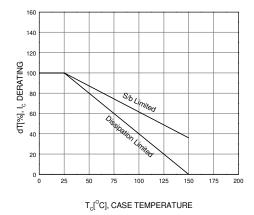


Figure 5. Derating Curve of Safe Operating Area

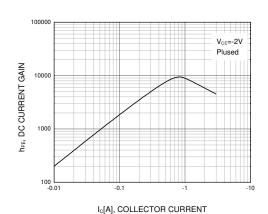


Figure 2. DC current Gain

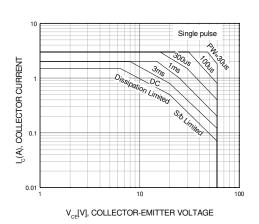


Figure 4. Safe Operating Area

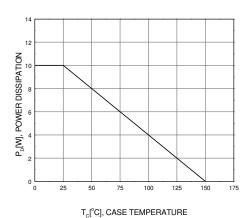
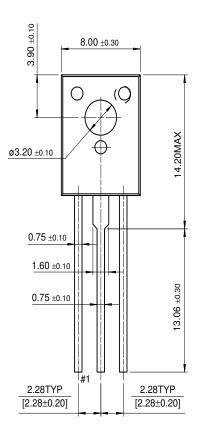


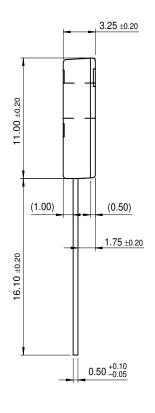
Figure 6. Power Derating

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Package Demensions

TO-126







Dimensions in Millimeters

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