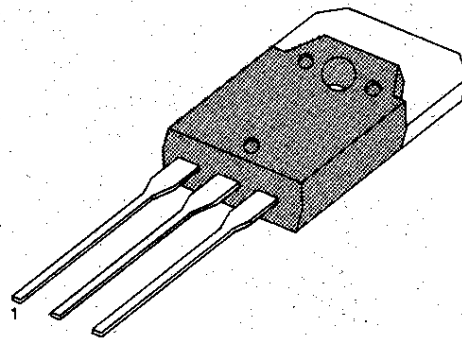


**KSD5005****NPN TRIPLE DIFFUSED  
PLANAR SILICON TRANSISTOR****COLOR TV HORIZONTAL OUT PUT  
APPLICATIONS**HIGH Collector-Base Voltage  $V_{CBO} = 1500V$ **ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ C$ )**

| Characteristic                               | Symbol    | Rating  | Unit       |
|--|-----------|---------|------------|
| Collector-Base Voltage                       | $V_{CBO}$ | 1500    | V          |
| Collector-Emitter Voltage                    | $V_{CEO}$ | 800     | V          |
| Emitter-Base Voltage                         | $V_{EBO}$ | 7       | V          |
| Collector Current                            | $I_C$     | 3.5     | A          |
| Collector Current (Peak)                     | $I_C$     | 10      | A          |
| Collector Dissipation ( $T_c = 25^\circ C$ ) | $P_C$     | 80      | W          |
| Junction Temperature                         | $T_J$     | 150     | $^\circ C$ |
| Storage Temperature                          | $T_{stg}$ | -55~150 | $^\circ C$ |

TO-3P



1. Base 2. Collector 3. Emitter

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )**

| Characteristic                       | Symbol        | Test Condition  | Min | Typ | Max | Unit    |
|--------------------------------------|---------------|---|-----|-----|-----|---------|
| Collector Cutoff Current             | $I_{CBO}$     | $V_{CB} = 800V, I_E = 0$  |     |     | 10  | $\mu A$ |
| Emitter Cutoff Current               | $I_{EBO}$     | $V_{EB} = 5V, I_C = 0$  |     |     | 1   | mA      |
| DC Current Gain                      | $h_{FE}$      | $V_{CE} = 5V, I_C = 0.5A$   | 8   |     |     |         |
| Collector Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 2.5A, I_B = 0.8A$  |     |     | 8   | V       |
| Base Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C = 2.5A, I_B = 0.8A$  |     |     | 1.5 | V       |
| Current Gain Bandwidth Product       | $f_T$         | $V_{CE} = 10V, I_C = 0.5A$  |     | 3   |     | MHz     |
| Fall Time                            | $t_f$         | $I_C = 3A, I_{B1} = 0.8A$<br>$I_{B2} = -1.6A, V_{CC} = 200V$<br>$R_L = 66.7 \Omega$ |     |     | 0.4 | $\mu S$ |