

KSD5004

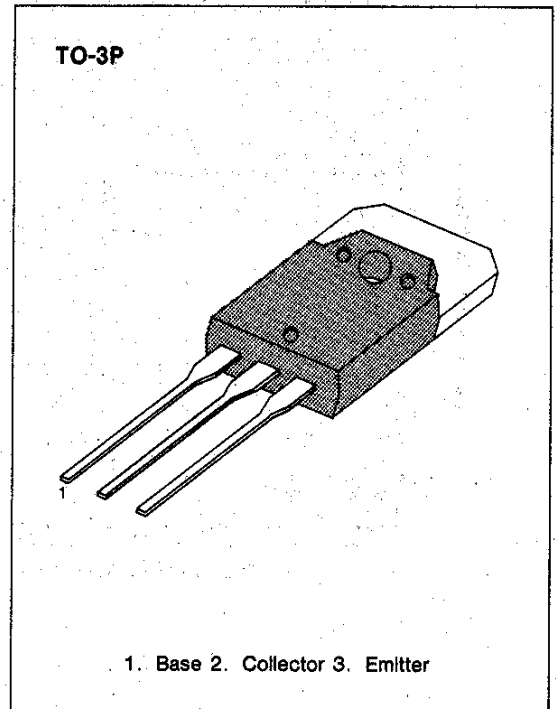
NPN TRIPLE DIFFUSED PLANAR SILICON TRANSISTOR

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 | 2.5 | 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 | $^{\circ}C$ |



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 | μA |
| 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 | $V_{CE(sat)}$ | $I_C=2A, I_B=0.6A$ | | | 8 | V |
| Base Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=2A, I_B=0.6A$ | | | 1.5 | V |
| Current Gain Bandwidth Product | f_T | $V_{CE}=10V, I_C=0.5A$ | | 3 | | MHz |
| Fall Time | t_f | $I_C=2A, I_{B1}=0.6A$ $I_{B2}=-1.2A, V_{CC}=200V$ $R_L=100\Omega$ | | | 0.4 | μS |