

**KSC2340**

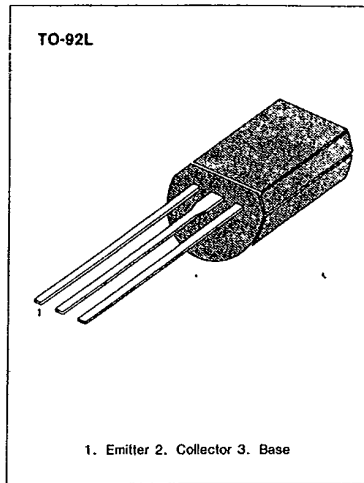
**NPN EPITAXIAL SILICON TRANSISTOR**

**COLOR TV CHROMA OUTPUT**

- Collector-Base Voltage  $V_{CBO}=350V$
- Current Gain-Bandwidth Product  $f_T=50MHz$  (Typ)

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}C$ )**

| Characteristic            | Symbol    | Rating    | Unit        |
|---------------------------|-----------|-----------|-------------|
| Collector-Base Voltage    | $V_{CBO}$ | 350       | V           |
| Collector-Emitter Voltage | $V_{CEO}$ | 350       | V           |
| Emitter-Base Voltage      | $V_{EBO}$ | 7         | V           |
| Collector Current         | $I_C$     | 100       | mA          |
| Collector Dissipation     | $P_C$     | 1         | W           |
| Junction Temperature      | $T_J$     | 150       | $^{\circ}C$ |
| Storage Temperature       | $T_{stg}$ | -55 ~ 150 | $^{\circ}C$ |



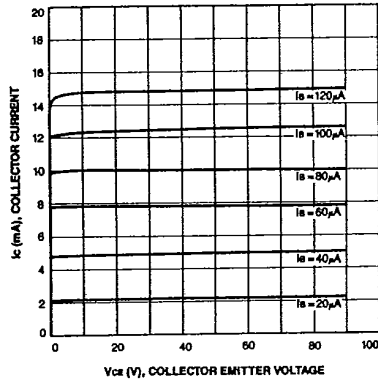
**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}C$ )**

| Characteristic                       | Symbol        | Test Conditions             | Min | Typ | Max | Unit    |
|--------------------------------------|---------------|-----------------------------|-----|-----|-----|---------|
| Collector-Base Breakdown Voltage     | $BV_{CBO}$    | $I_C=100\mu A, I_E=0$       | 350 |     |     | V       |
| Collector-Emitter Breakdown Voltage  | $BV_{CEO}$    | $I_C=5mA, I_B=0$            | 350 |     |     | V       |
| Emitter-Base Breakdown Voltage       | $BV_{EBO}$    | $I_E=-100\mu A, I_C=0$      | 7   |     |     | V       |
| Collector Cutoff Current             | $I_{CBO}$     | $V_{CB}=200V, I_E=0$        |     |     | 0.1 | $\mu A$ |
| DC Current Gain                      | $h_{FE}$      | $V_{CE}=10V, I_C=20mA$      | 30  |     | 150 |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10mA, I_B=1mA$         |     |     | 0.5 | V       |
| Current Gain Bandwidth Product       | $f_T$         | $V_{CE}=10V, I_C=20mA$      | 50  |     |     | MHz     |
| Output Capacitance                   | $C_{ob}$      | $V_{CB}=10V, I_E=0, f=1MHz$ |     | 8   |     | pF      |

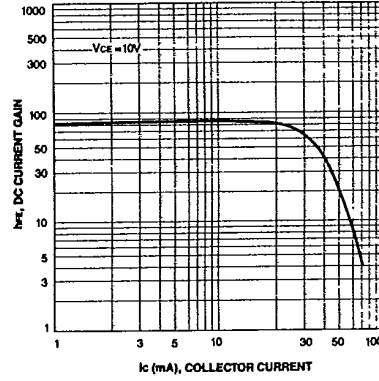
**KSC2340**

**NPN EPITAXIAL SILICON TRANSISTOR**

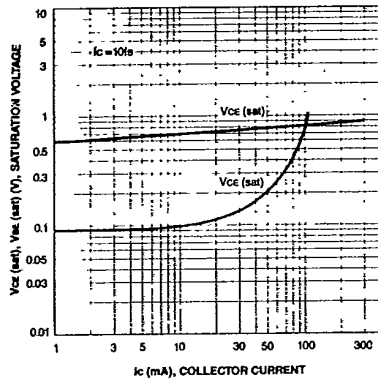
**STATIC CHARACTERISTIC**



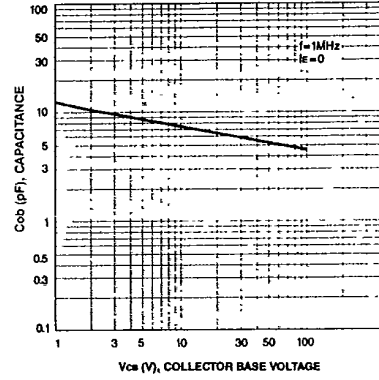
**DC CURRENT GAIN**



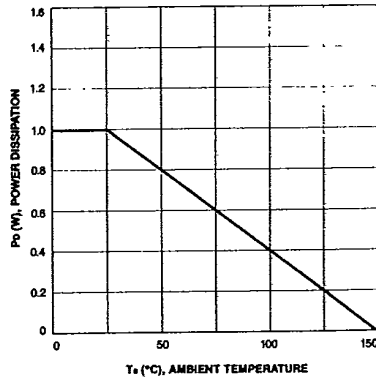
**BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE**



**COLLECTOR OUTPUT CAPACITANCE**



**POWER DERATING**



3