



Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

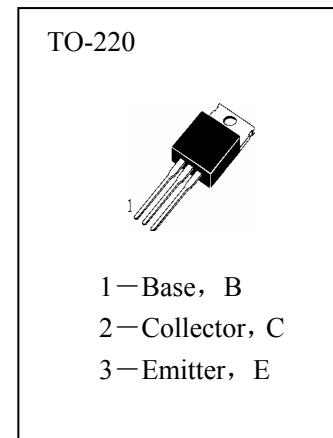
HC2073

■ APPLICATIONS

TV Vertical Deflection Output .

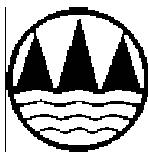
■ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

| | |
|---|-----------|
| T_{stg} —Storage Temperature..... | -55~150°C |
| T_j —Junction Temperature..... | 150°C |
| P_c —Collector Dissipation($T_c=25^\circ\text{C}$)..... | 25W |
| V_{CBO} —Collector-Base Voltage..... | 150V |
| V_{CEO} —Collector-Emitter Voltage..... | 150V |
| V_{EBO} —Emitter-Base Voltage..... | 5V |
| I_c —Collector Current..... | 1.5A |



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

| Symbol | Characteristics | Min | Typ | Max | Unit | Test Conditions |
|-----------------|---------------------------------------|-----|-----|-----|---------------|---|
| BVCBO | Collector-Base Breakdown Voltage | 150 | | | V | $I_C=500 \mu\text{A}, I_E=0$ |
| BVCEO | Collector-Emitter Breakdown Voltage | 150 | | | V | $I_C=10\text{mA}, I_B=0$ |
| BVEBO | Emitter-Base Breakdown Voltage | 5 | | | V | $I_E=500 \mu\text{A}, I_C=0$ |
| HFE | DC Current Gain | 40 | 75 | 140 | | $V_{CE}=10\text{V}, I_C=500\text{mA}$ |
| VCE(sat) | Collector- Emitter Saturation Voltage | | | 1 | V | $I_C=500\text{mA}, I_B=50\text{mA}$ |
| ICBO | Collector Cut-off Current | | | 10 | μA | $V_{CB}=120\text{V}, I_E=0$ |
| IEBO | Emitter Cut-off Current | | | 10 | μA | $V_{EB}=5\text{V}, I_C=0$ |
| f _T | Current Gain-Bandwidth Product | | 4 | | MHz | $V_{CE}=10\text{V}, I_C=500\text{mA}$ |
| C _{ob} | Output Capacitance | | | 50 | pF | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ |



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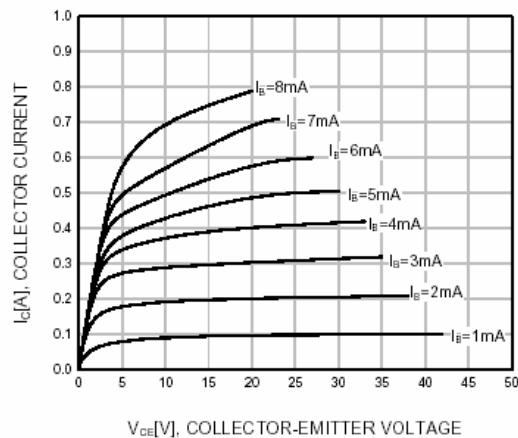


Figure 1. Static Characteristic

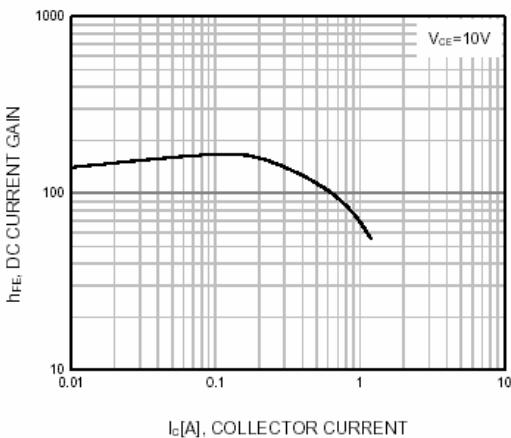


Figure 2. DC current Gain

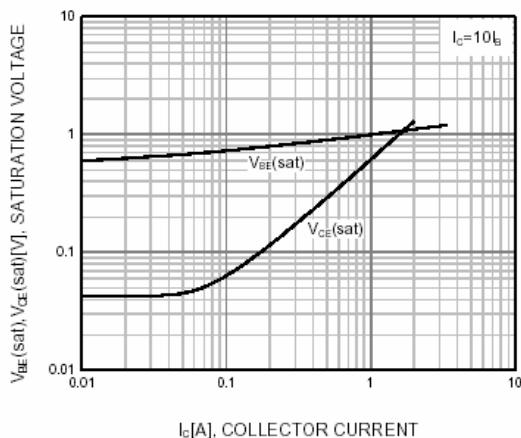


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

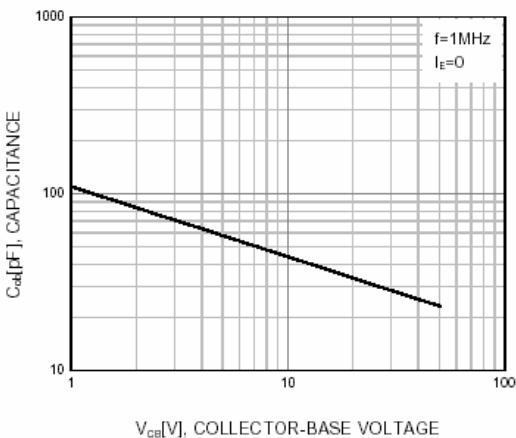


Figure 4. Collector-Emitter On Voltage

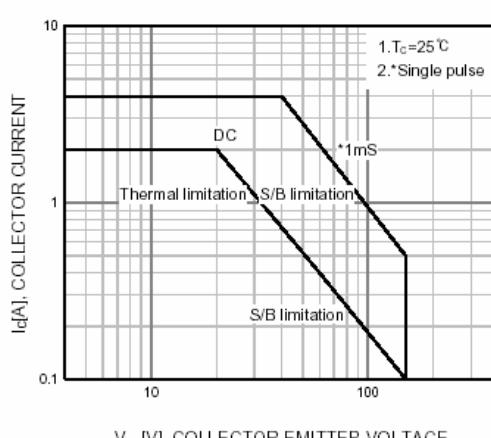


Figure 5. Safe Operating Area

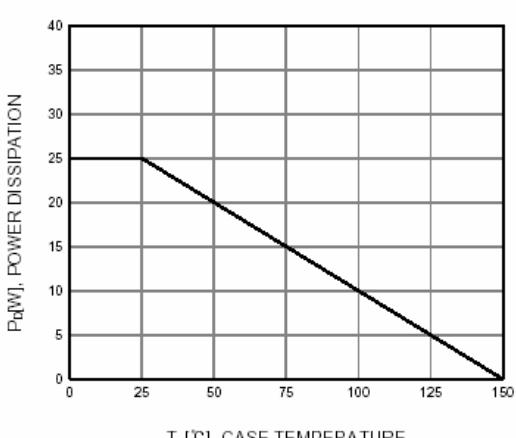


Figure 6. Power Derating