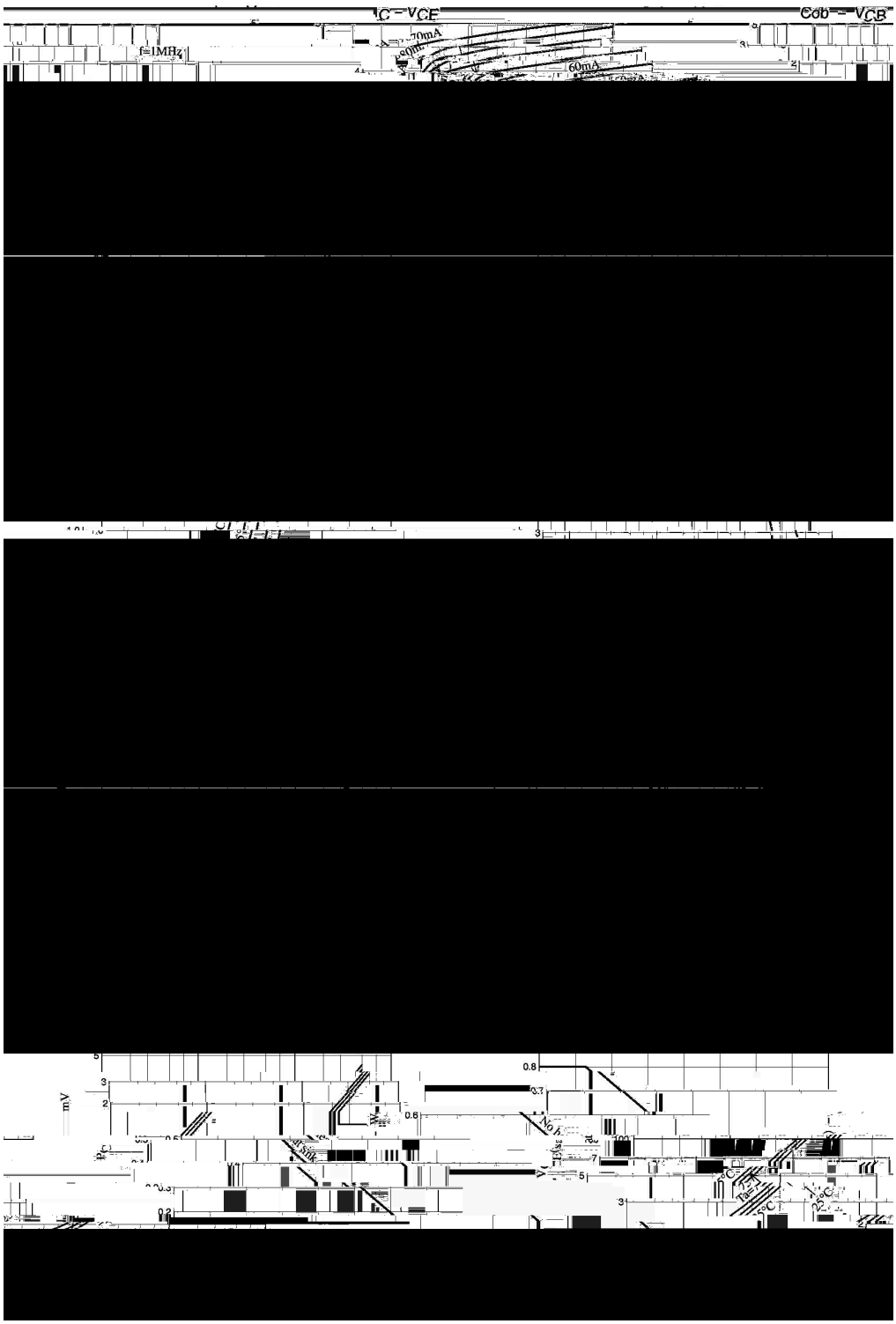
| | | |
|---|---|---|
| TO-220 | NPN | Silicon NPN transistor in a TO-220 Plastic Package. |

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 80 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 50 | V |
| Collector to Emitter Voltage | $V_{CES}$ | 80 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 6.0 | V |
| Collector Current - Continuous | $I_C$ | 5.0 | A |
| Peak Collector Current | $I_{CP}$ | 7.5 | A |
| Base Current - Continuous | $I_B$ | 1.2 | A |
| Collector Power Dissipation | $P_C$ | 2 | W |
| | $P_C(T_C=25\ \ )$ | 15 | W |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

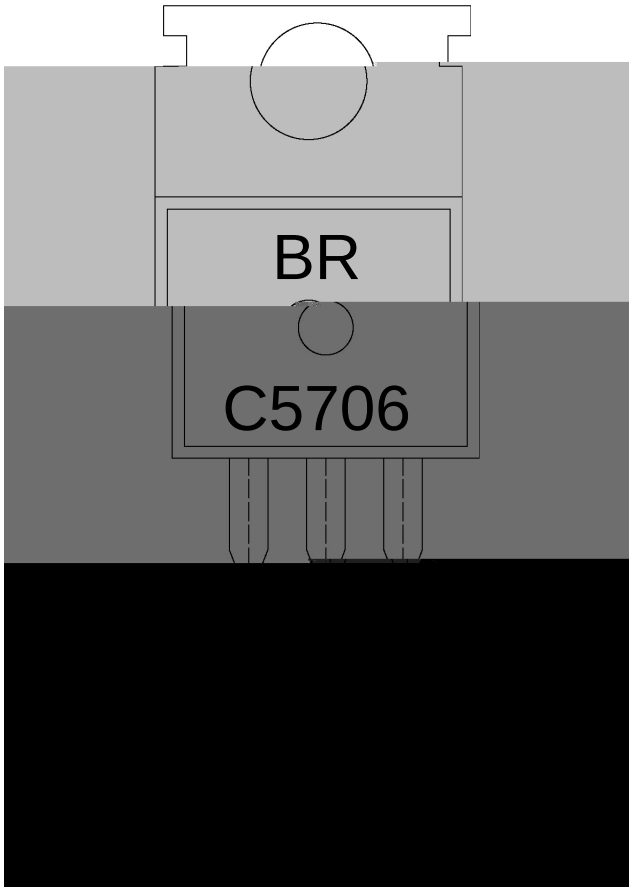
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to Base Breakdown Voltage | $V_{CBO}$ | $I_C$=0.01mA $I_E$=0 | 80 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{CES}$ | $I_C$=0.1mA $R_{BE}$=0 | 80 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=1.0mA $R_{BE}$=∞ | 50 | | | V |
| Emitter to Base Breakdown Voltage | $V_{EBO}$ | $I_C$=0.01mA $I_C$=0 | 6.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=40V $I_E$=0 | | | 1.0 | μA |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{EB}$=4.0V $I_C$=0 | | | 1.0 | μA |
| DC Current Gain | $h_{FE}$ | $V_{CE}$=2.0V $I_C$=0.5A | 200 | | 560 | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)(1)}$ | $I_C$=1.0A $I_B$=0.05A | | 0.09 | 0.135 | V |
| | $V_{CE(sat)(2)}$ | $I_C$=2.0A $I_B$=0.1A | | 0.16 | 0.24 | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)}$ | $V_{CE}$=2.0V $I_C$=0.1A | | 0.89 | 1.2 | V |

## / Electrical Characteristic Curve



**2SC5706**

## / Marking Instructions




BR

C5706

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Note:

| | |
|---|---|
| BR: | Company Code |
| C5706: | Product Type. |
| ****: | Lot No. Code, code change with Lot No. |