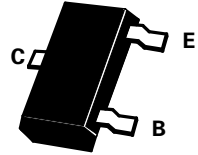


SOT23 PNP SILICON PLANAR SWITCHING TRANSISTORS

ISSUE 2 – SEPTEMBER 95

BSS82B BSS82C

PARTMARKING DETAILS - BSS82B - CL
BSS82C - CM



ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|---------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -60 | V |
| Collector-Emitter Voltage | V_{CEO} | -60 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Peak Pulse Current | I_{CM} | -800 | mA |
| Power Dissipation at $T_{amb}=25^{\circ}C$ | P_{TOT} | 330 | mW |
| Operating and Storage Temperature Range | $t_j:t_{stg}$ | -55 to +150 | $^{\circ}C$ |

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$).

| PARAMETER | | SYMBOL | MIN. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|------------------|---------------|-----------|--------------|---------------|---|
| Collector-Base Breakdown Voltage | | $V_{(BR)CBO}$ | -60 | | V | $I_C = -10\mu A$ |
| Collector-Emitter Breakdown Voltage | | $V_{(BR)CEO}$ | -60 | | V | $I_C = -10mA^*$ |
| Emitter-Base Breakdown Voltage | | $V_{(BR)EBO}$ | -5 | | | $I_E = -10\mu A$ |
| Collector Cut-Off Current | | I_{CBO} | | -10 -10 | nA μA | $V_{CB} = -50V$, $V_{CB} = -50V$, $T_{amb} = 150^{\circ}C$ |
| Emitter Cut-Off Current | | I_{EBO} | | -10 | nA | $V_{BE} = -3V$ |
| Collector-Emitter Saturation Voltage | | $V_{CE(sat)}$ | | -0.4 -1.6 | V V | $I_C = -150mA$, $I_B = -15mA^*$ $I_C = -500mA$, $I_B = 50mA^*$ |
| Static Forward Current Transfer Ratio | BSS80B BSS80C | h_{FE} | 40 100 | 120 300 | | $I_C = 150mA$, $V_{CE} = 10V$ $I_C = 150mA$, $V_{CE} = 10V$ |
| Transition Frequency | | f_T | 200 | | MHz | $V_{CE} = -20V$, $I_C = -50mA$ $f = 100MHz$ |
| Output Capacitance | | C_{obo} | | 8 | pF | $V_{CB} = -10V$, $f = 1MHz$ |
| Delay Time | | t_d | | 10 | ns | $V_{CC} = -30V$, $I_C = -150mA$ $I_{B1} = -I_{B2} = -15mA$ |
| Rise Time | | t_r | | 40 | ns | |
| Storage Time | | t_s | | 80 | ns | |
| Fall Time | | t_f | | 30 | ns | |

* Measured under pulsed conditions. Pulse width = 300 μs . Duty cycle 2%