



BC 485

BC 487

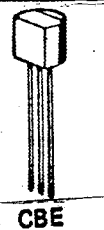
BC 489

NPN SILICON PLANAR EPITAXIAL TRANSISTORS

MICRO ELECTRONICS

BC485, BC487 and BC489 are NPN silicon planar epitaxial transistors designed for use as high voltage high current driver and output transistors.

CASE TO-92F



ABSOLUTE MAXIMUM RATINGS

| | | BC485 | BC487 | BC489 |
|--|----------|---------------|-------|-------|
| Collector-Base Voltage | VCBO | 45V | 60V | 80V |
| Collector-Emitter Voltage | VCEO | 45V | 60V | 80V |
| Emitter-Base Voltage | VEBO | | 5V | |
| Collector Current | IC | | 1A | |
| Total Power Dissipation @ TA=25°C | Ptot | | 625mW | |
| | | | 1.5W | |
| Operating Junction & Storage Temperature | Tj, Tstg | -55 to +150°C | | |

ELECTRICAL CHARACTERISTICS AT TA=25°C

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNIT | TEST CONDITIONS |
|--------------------------------------|-----------|--------|-----|-----|------|------------------|
| Collector-Base Breakdown Voltage | BVCBO | ↑ | | | V | IC=0.1mA IE=0 |
| Collector-Emitter Breakdown Voltage | BVCEO | Note 1 | | | V | IC=10mA IB=0 |
| Emitter-Base Breakdown Voltage | BVEBO | ↓ | | | V | IE=10µA IC=0 |
| Collector Cutoff Current | ICBO | | | 100 | nA | VCB=VCBO IE=0 |
| Collector-Emitter Saturation Voltage | VCE(SAT)* | | | 0.5 | V | IC=500mA IB=50mA |
| Base-Emitter Saturation Voltage | VBE(SAT)* | | | 1.2 | V | IC=500mA IB=50mA |
| D.C. Current Gain | HFE* | 40 | | | | IC=10mA VCE=2V |
| | | 60 | | 400 | | IC=100mA VCE=2V |
| | | 60 | | 150 | | IC=100mA VCE=2V |
| | | 100 | | 250 | | IC=100mA VCE=2V |
| | | 160 | | 400 | | IC=100mA VCE=2V |
| | | 15 | | | | IC=1A VCE=5V |
| Current Gain-Bandwidth Product | fT | | 75 | | MHz | IC=50mA VCE=2V |
| Output Capacitance | Cob | | 12 | | pF | VCB=10V IE=0 |
| Input Capacitance | Cib | | 85 | | pF | VBE=2V IC=0 |

Note 1 : equal to the values of the absolute maximum ratings.

* Pulse Test : Pulse Width=0.3ms, Duty Cycle=1%

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