

1-33-04



ART 2088

CD 2087
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RF POWER TRANSISTORS-NPN

RUGGED High Gain, N.P.N. UHF Power Transistor for use up through 500 MHz.

CD 2087 can be operated at full class A at 1 watt PEP or 3 watts in class AB, B or C operation.

CD 2088 can be operated at full class A at 3 watts PEP or 10 watts in Class AB, B or C operation.

| | CD2087 | CD2088 | |
|---|--------|--------|---|
| Maximum Power dissipation (See Note) | | | |
| Total power dissipation at $T_{case} = 25^{\circ}C$ | 10 | 25 | W |

Maximum Voltage and Current

| | | | | |
|------------------------------|-----------|-----|-----|---|
| Collector to Emitter voltage | V_{CES} | 50 | 50 | V |
| Emitter to Base Voltage | V_{EBO} | 4 | 4 | V |
| Collector Current | I_C | 0.5 | 1.2 | A |

ELECTRICAL CHARACTERISTICS (25°C unless otherwise specified)

| | | | | |
|--|----------------|------|------|----------|
| Power Output ($V_{CC} = 28$ V, $f = 400$ MHz) | P_{OUT} min. | 3 | 10 | W |
| Power Input ($V_{CC} = 28$ V, $f = 400$ MHz) (At rated Power Output) | P_{IN} max. | 0.3 | 1 | W |
| Collector Efficiency (At rated Power Output) | η min. | 60 | 60 | % |
| Series Input Impedance (At rated Output Power and frequency) | Z_{IN} typ. | 4.4* | 1.7* | Ω |
| Series Load Impedance (At rated Output Power and frequency) | Z_L | | | Ω |
| Collector to Base Capacitance ($V_{CB} = 28$ V, $I_E = 0$, $f = 1$ MHz) | C_{CB} max. | 5 | 13 | pF |
| Emitter to Base Voltage at $I_E = 5$ mA | V_{EBO} min. | 4 | 4 | V |
| Collector to Emitter at $I_C = 50$ mA | V_{CES} min. | 50 | 50 | V |

NOTE:

This rating gives a maximum junction temperature of 200°C with junction to case thermal resistance of 7.0°C/watt.

B001-5814 EDITOR SA

