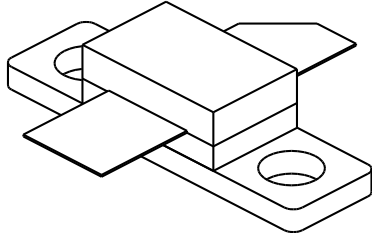


1819AB25

25 Watts, 25 Volts, Class AB
Personal 1808 - 1880 MHz

| | |
|--|---|
| <p>GENERAL DESCRIPTION</p> <p>The 1819AB25 is a COMMON EMITTER transistor capable of providing 25 Watts of Class AB, RF output power over the band 1808-1880 MHz. This transistor is specifically designed for PERSONAL COMMUNICATIONS BASE STATION amplifier applications. It includes Input prematching and utilizes Gold metalization and HIGH VALUE EMITTER ballasting to provide high reliability and supreme ruggedness. .</p> | <p>CASE OUTLINE 55CT, STYLE 2 COMMON EMITTER</p>  |
| <p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 87 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 60Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 10.0 Amps</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 150°C Operating Junction Temperature + 200°C</p> | |

ELECTRICAL CHARACTERISTICS @ 25 °C

| SYMBOL | CHARACTERISTICS | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|-------------------------|-------------------------|-----------------------------|-----|-----|-----|-------|
| P_{out} | Power Out | F = 1880 MHz | 25 | | | Watt |
| P_{in} | Power Input | V _{ce} = 25 Volts | | | 5.0 | Watt |
| P_g | Power Gain | I _{cq} = 0.27 Amps | 7.0 | 7.5 | | dB |
| η_c | Collector Efficiency | As Above | | 43 | | % |
| VSWR₁ | Load Mismatch Tolerance | | | | 3:1 | |

| | | | | | | |
|------------------------|--------------------------------|---|-----|----|-----|-------|
| BVces | Collector to Emitter Breakdown | I _c = 50 mA | 60 | | | Volts |
| BVebo | Emitter to Base Breakdown | I _e = 10 mA | 3.5 | | | Volts |
| I_{ces} | Collector Leakage Current | V _{ce} = 27 Volts | | | 10 | mA |
| h_{FE} | DC - Current Gain | V _{ce} = 5 V, I _c = 0.7 A | 20 | | 100 | |
| C_{ob} | Output Capacitance | F = 1 MHz, V _{cb} = 28 V | | 28 | | pF |
| θ_{jc} | Thermal Resistance | T _c = 25°C | | | 2.0 | °C/W |

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