

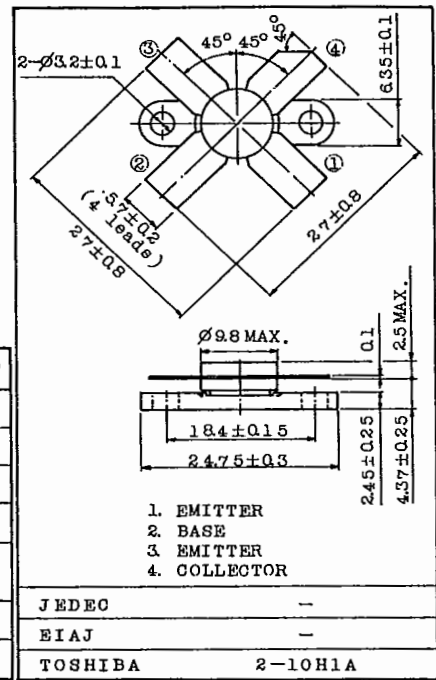
VHF BAND POWER AMPLIFIER APPLICATIONS.

FEATURES :

- . Output Power : $P_o=40W$ (Min.)
 ($f=175MHz$, $V_{CC}=13.5V$, $P_i=10W$)
- . 100% Tested for Load Mismatch Stress at All Phase Angles with 30:1 VSWR @ $V_{CC}=13.5V$, $P_i=10W$, $f=175MHz$

MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------------------|-----------|-----------|------|
| Collector-Base Voltage | V_{CBO} | 35 | V |
| Collector-Emitter Voltage | V_{CEO} | 18 | V |
| Emitter-Base Voltage | V_{EBO} | 3.5 | V |
| Collector Current | I_C | 10 | A |
| Collector Power Dissipation (Tc=25°C) | P_C | 70 | W |
| Junction Temperature | T_j | 175 | °C |
| Storage Temperature Range | T_{stg} | -65 ~ 175 | °C |



Weight : 4.0g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------------------|---------------|-----------------------------------|------|---------------|------|----------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=15V$, $I_E=0$ | - | - | 2 | mA |
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=20mA$, $I_E=0$ | 35 | - | - | V |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=50mA$, $I_B=0$ | 18 | - | - | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=1mA$, $I_C=0$ | 3.5 | - | - | V |
| DC Current Gain | h_{FE} | $V_{CE}=5V$, $I_C=5A$ | 10 | - | - | |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10V$, $I_E=0$, $f=1MHz$ | - | - | 160 | pF |
| Output Power | P_o | (Fig.) | 40 | 44 | - | W |
| Power Gain | G_{pe} | $V_{CC}=13.5V$, $f=175MHz$, | 6.0 | 6.4 | - | dB |
| Collector Efficiency | η_c | $P_i=10W$ | 60 | 73 | - | % |
| Series Equivalent Input Impedance | Z_{in} | $V_{CC}=13.5V$, $f=175MHz$, | - | 0.95 -j0.1 | - | Ω |
| Series Equivalent Output Impedance | Z_{OUT} | $P_o=40W$ | - | 2.6 -j0.15 | - | Ω |

Note : Above parameters , ratings , limits and conditions are subject to change.