



MRAL1720-9

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI MRAL1720-9** is Designed for Class C, Common Base Wideband Large Signal Amplifier Applications up to 2.0 GHz.

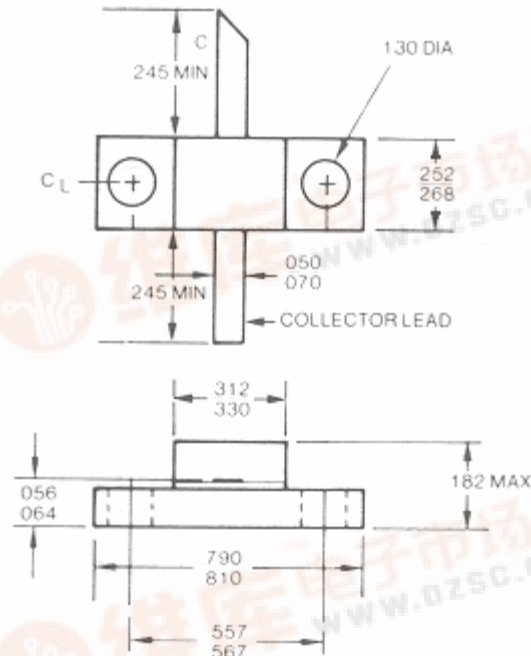
## FEATURES:

- Diffused Ballast Resistors.
- Internal Matching Network
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

|               |                   |
|---------------|-------------------|
| $I_C$         | 4.0 A (CONT)      |
| $V_{CES}$     | 42 V              |
| $V_{EBO}$     | 3.5 V             |
| $T_J$         | -65 °C to +200 °C |
| $T_{STG}$     | -65 °C to +150 °C |
| $\theta_{JC}$ | 4.5 °C/W          |

## PACKAGE STYLE 400 4L FLG



## CHARACTERISTICS $T_C = 25\text{ }^{\circ}\text{C}$

| SYMBOL     | TEST CONDITIONS                                                                 | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|---------------------------------------------------------------------------------|---------|---------|---------|-------|
| $BV_{CES}$ | $I_C = 80\text{ mA}$                                                            | 42      |         |         | V     |
| $BV_{EBO}$ | $I_E = 1.0\text{ mA}$                                                           | 3.5     |         |         | V     |
| $I_{CBO}$  | $V_{CB} = 22\text{ V}$                                                          |         |         | 2.0     | mA    |
| $h_{FE}$   | $V_{CE} = 5.0\text{ V}$ $I_C = 400\text{ mA}$                                   | 10      |         | 100     | ---   |
| $C_{ob}$   | $V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$                                     |         |         | 12      | pF    |
| $G_{PB}$   | $V_{CE} = 22\text{ V}$ $P_{out} = 9.0\text{ W}$ $f = 1.7\text{ GHz \& 2.0 GHz}$ | 6.5     |         |         | dB    |
| $\eta_c$   |                                                                                 | 40      |         |         | %     |

