

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

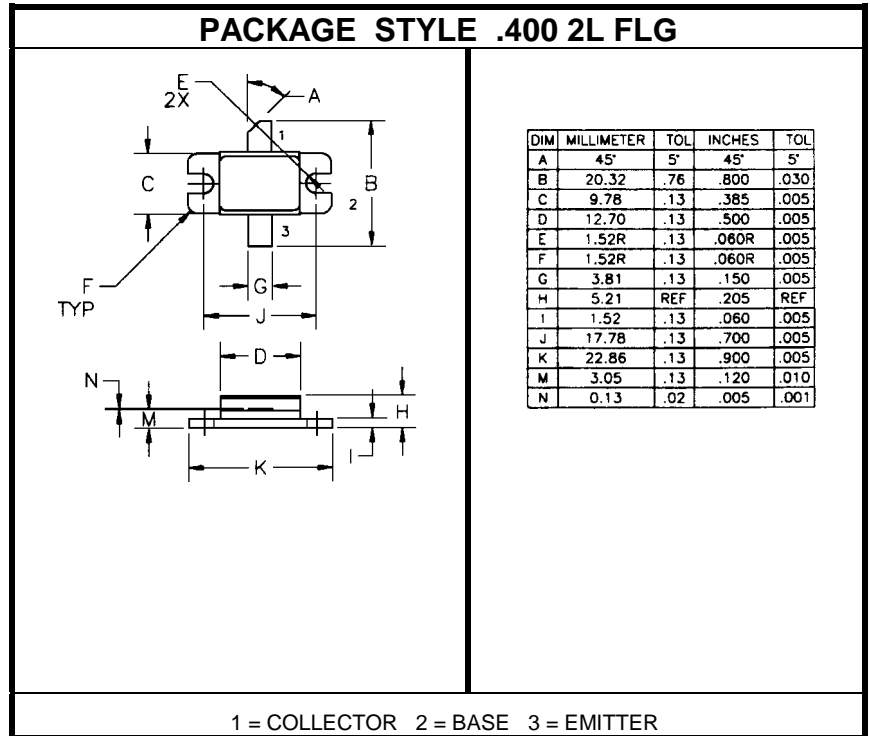
The **ASI MX0912B351Y** is Designed for General Purpose Class C Power Amplifier Applications up to 1215 MHz.

**FEATURES:**

- $P_G = 7.0$  dB min.at 50 W / 1215 MHz
- Common Base
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

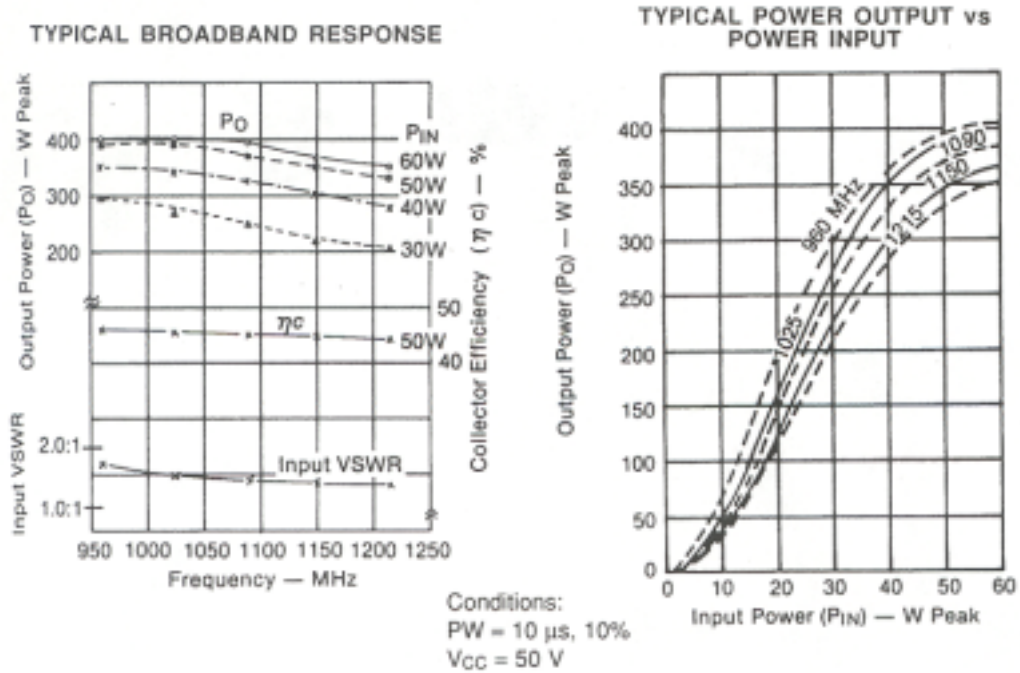
|               |                            |
|---------------|----------------------------|
| $V_{CE}$      | 20 V                       |
| $V_{CB}$      | 65 V                       |
| $V_{EB}$      | 3.0 V                      |
| $I_C$         | 21 A                       |
| $P_{DISS}$    | 960 W @ $T_C = 25^\circ C$ |
| $T_J$         | -65 °C to +200 °C          |
| $T_{STG}$     | -65 °C to +200 °C          |
| $\theta_{JC}$ | 0.18 °C/W                  |


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

| SYMBOL    | TEST CONDITIONS                                      | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------|--|---------|---------|---------|-------|
| $I_{CBO}$ | $V_{CB} = 65$ V                                      |         |         | 140     | mA    |
| $I_{CES}$ | $V_{CE} = 60$ V                                      |         |         | 140     | mA    |
| $I_{EBO}$ | $V_{EB} = 1.5$ V                                     |         |         | 1.4     | mA    |
| $P_G$     | $V_{CC} = 50$ $P_{OUT} = 325$ W $f = 960 - 1215$ MHz | 7.0     |         |         | dB    |
| $\eta_c$  |  | 40      |         |         | %     |



TYPICAL PERFORMANCE



MAXIMUM THERMAL RESISTANCE vs PULSE WIDTH & DUTY CYCLE

