

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

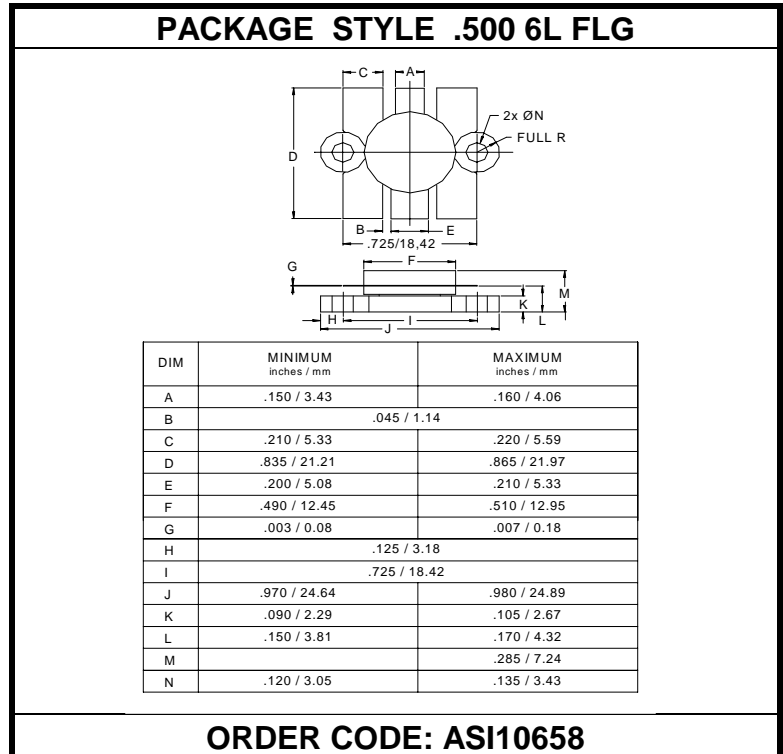
The **ASI TVV014A** is designed for Television Band III Applications up to 225 MHz.

FEATURES:

- Common Emitter
- $P_G = 14$ dB at 14 W/225 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting

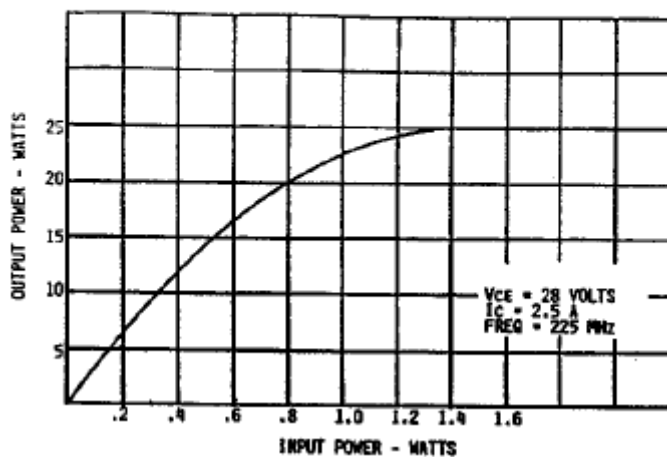
MAXIMUM RATINGS

| | |
|---------------|----------------------------|
| I_C | 10 A |
| V_{CBO} | 60 V |
| V_{CEO} | 35 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 140 W @ $T_C = 25^\circ C$ |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 1.5 °C/W |


CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------------|---|---------|---------|---------|-----------|
| BV_{CEO} | $I_C = 50$ mA | 35 | | | V |
| BV_{CER} | $I_C = 50$ mA $R_{BE} = 10 \Omega$ | 60 | | | V |
| BV_{EBO} | $I_E = 10$ mA | 4.0 | | | V |
| I_{CES} | $V_{CE} = 50$ V | | | 5.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 1.0$ A | 10 | | 100 | --- |
| C_{OB} | $V_{EB} = 28$ V $f = 1.0$ MHz | | | 80 | pF |
| P_G IMD_1 | $V_{CE} = 28$ V $I_C = 2.5$ A $f = 225$ MHz $P_{OUT} = 14$ W | 14 | | -55 | dB dBc |

POWER OUTPUT vs POWER INPUT



IMD vs POWER OUTPUT

