

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI UHBM45** is Designed for FM Land Mobile Applications up to 836 MHz.

FEATURES:

- Internal Input Matching Network
- $P_G = 5.0$ dB at 45 W/836 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|----------------------------------|
| I_C | 9.0 A |
| V_{CB0} | 36 V |
| V_{CEO} | 18 V |
| V_{CES} | 36 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 150 W @ $T_C = 25^\circ\text{C}$ |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 1.2 °C/W |

PACKAGE STYLE .230 6L FLG

| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .355 / 9.02 | .365 / 9.27 |
| B | .115 / 2.92 | .125 / 3.18 |
| C | .075 / 1.91 | .085 / 2.16 |
| D | .225 / 5.72 | .235 / 5.97 |
| E | .090 / 2.29 | .110 / 2.79 |
| F | .720 / 18.29 | .730 / 18.54 |
| G | .970 / 24.64 | .980 / 24.89 |
| H | .355 / 9.02 | .365 / 9.27 |
| I | .004 / 0.10 | .006 / 0.15 |
| J | .120 / 3.05 | .130 / 3.30 |
| K | .160 / 4.06 | .180 / 4.57 |
| L | .230 / 5.84 | .260 / 6.60 |

ORDER CODE: ASI10667

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

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------|--|---------|---------|---------|---------|
| BV_{CEO} | $I_C = 50$ mA | 36 | | | V |
| BV_{CES} | $I_C = 50$ mA $R_{BE} = 10 \Omega$ | 18 | | | V |
| BV_{EBO} | $I_E = 10$ mA | 4.0 | | | V |
| I_{CB0} | $V_{CB} = 15$ V | | | 5.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 1.0$ A | 5.0 | | 200 | --- |
| C_{OB} | $V_{CB} = 12.5$ V $f = 1.0$ MHz | | 80 | | pF |
| P_G η_C | $V_{CE} = 12.5$ V $P_{OUT} = 45$ W $f = 836$ MHz | 4.7 | 35 | | dB % |