

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

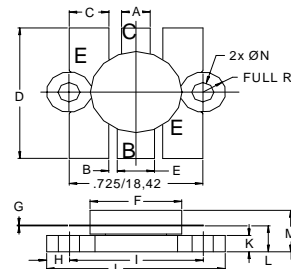
The **ASI BM30-12** is Designed for VHF land mobil applications in the 150-175 MHz range.

FEATURES:

- Common Emitter
- $P_{OUT} = 30\text{ W}$ at 175 MHz
- **Omnigold™** Metalization System
- Internal Matching network

MAXIMUM RATINGS

| | |
|---------------|---|
| I_C | 8.0 A |
| V_{CES} | 36 V |
| V_{CEO} | 18 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 65 W @ $T_C = 25\text{ }^\circ\text{C}$ |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +200 °C |
| θ_{JC} | 2.7 °C/W |

PACKAGE STYLE .500 6L FLG


| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .150 / 3.43 | .160 / 4.06 |
| B | | .045 / 1.14 |
| C | .210 / 5.33 | .220 / 5.59 |
| D | .835 / 21.21 | .865 / 21.97 |
| E | .200 / 5.08 | .210 / 5.33 |
| F | .490 / 12.45 | .510 / 12.95 |
| G | .003 / 0.08 | .007 / 0.18 |
| H | | .125 / 3.18 |
| I | | .725 / 18.42 |
| J | .970 / 24.64 | .980 / 24.89 |
| K | .090 / 2.29 | .105 / 2.67 |
| L | .150 / 3.81 | .170 / 4.32 |
| M | | .285 / 7.24 |
| N | .120 / 3.05 | .135 / 3.43 |

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

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------------------------------|---|---------|---------------------------|---------|----------------------|
| BV_{CES} | $I_C = 20\text{ mA}$ | 36 | | | V |
| BV_{CEO} | $I_C = 50\text{ mA}$ | 18 | | | V |
| BV_{EBO} | $I_E = 5.0\text{ mA}$ | 4.0 | | | V |
| C_{ob} | $V_{CB} = 12.5\text{ V}$ $f = 1.0\text{ MHz}$ | | 110 | | pF |
| P_{OUT} P_{IN} η_C | $V_{CC} = 12.5\text{ V}$ $P_{OUT} = 40\text{ W}$ $f = 175\text{ MHz}$ | 30 | 4.5 60 | | W W % |
| Z_{IN} Z_L | $P_{OUT} = 30\text{ W}$ $f = 175\text{ MHz}$ | | 1.0 + j1.4 1.75 + j0.5 | | Ω Ω |

This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.