

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

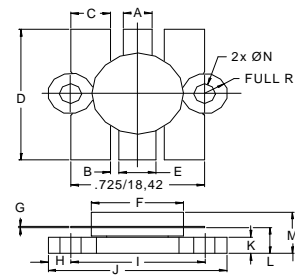
The ASI VMB100-12 is Designed for

FEATURES:

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- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|-------------------------|--------------------------------|
| I_C | 20 A |
| V_{CB0} | 36 V |
| V_{CEO} | 18 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 270 W @ T _C = 25 °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 0.65 °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 |

ORDER CODE: ASI10747
CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|--|--|---------|---------|---------|-----------------------|
| BV_{CB0} | I _C = 50 mA | 36 | | | V |
| BV_{CES} | I _C = 100 mA | 36 | | | V |
| BV_{CEO} | I _C = 100 mA | 18 | | | V |
| BV_{EBO} | I _E = 10 mA | 4.0 | | | V |
| I_{CES} | V _{CE} = 15 V | | | 15 | mA |
| h_{FE} | V _{CE} = 5.0 V I _C = 5.0 A | 20 | | --- | --- |
| C_{OB} | V _{CB} = 12.5 V MHz f = 1.0 | | | 400 | pF |
| P_G η_c | V _{CE} = 12.5 V P _{OUT} = 100 W f = 88 MHz | 10 | 60 | | dB % |