



TVV030

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The ASI TVV030 is Designed for

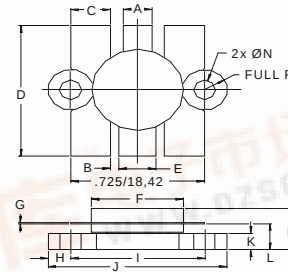
## FEATURES:

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- **Omnigold™** Metalization System

## MAXIMUM RATINGS

|               |                                             |
|---------------|---------------------------------------------|
| $I_C$         | 16 A                                        |
| $V_{CBO}$     | 60 V                                        |
| $V_{CEO}$     | 30 V                                        |
| $V_{EBO}$     | 4.0 V                                       |
| $P_{DISS}$    | 150 W @ $T_C = 25^\circ\text{C}$            |
| $T_J$         | $-65^\circ\text{C}$ to $+200^\circ\text{C}$ |
| $T_{STG}$     | $-65^\circ\text{C}$ to $+150^\circ\text{C}$ |
| $\theta_{JC}$ | $1.2^\circ\text{C/W}$                       |

## PACKAGE STYLE .500 6L FLG



| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>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: ASI10660

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

| SYMBOL     | TEST CONDITIONS                                                  | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|------------------------------------------------------------------|---------|---------|---------|-------|
| $BV_{CBO}$ | $I_C = 100\text{ mA}$                                            | 60      |         |         | V     |
| $BV_{CER}$ | $I_C = 100\text{ mA}$ $R_{BE} = 10\ \Omega$                      | 60      |         |         | V     |
| $BV_{CEO}$ | $I_C = 100\text{ mA}$                                            | 30      |         |         | V     |
| $BV_{EBO}$ | $I_E = 10\text{ mA}$                                             | 4.0     |         |         | V     |
| $I_{CES}$  | $V_{CB} = 50\text{ V}$                                           |         |         | 5.0     | mA    |
| $h_{FE}$   | $V_{CE} = 5.0\text{ V}$ $I_C = 1.0\text{ A}$                     | 10      |         | 120     | ---   |
| $C_{OB}$   | $V_{CB} = 30\text{ V}$ $f = 1.0\text{ MHz}$                      |         |         | 150     | pF    |
| $P_G$      | $V_{CE} = 28\text{ V}$ $I_C = 3.5\text{ A}$ $f = 225\text{ MHz}$ | 7.5     |         |         | dB    |
| $IMD_1$    | $P_{OUT} = 30\text{ W}$                                          | -53     |         |         | dB    |

