

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

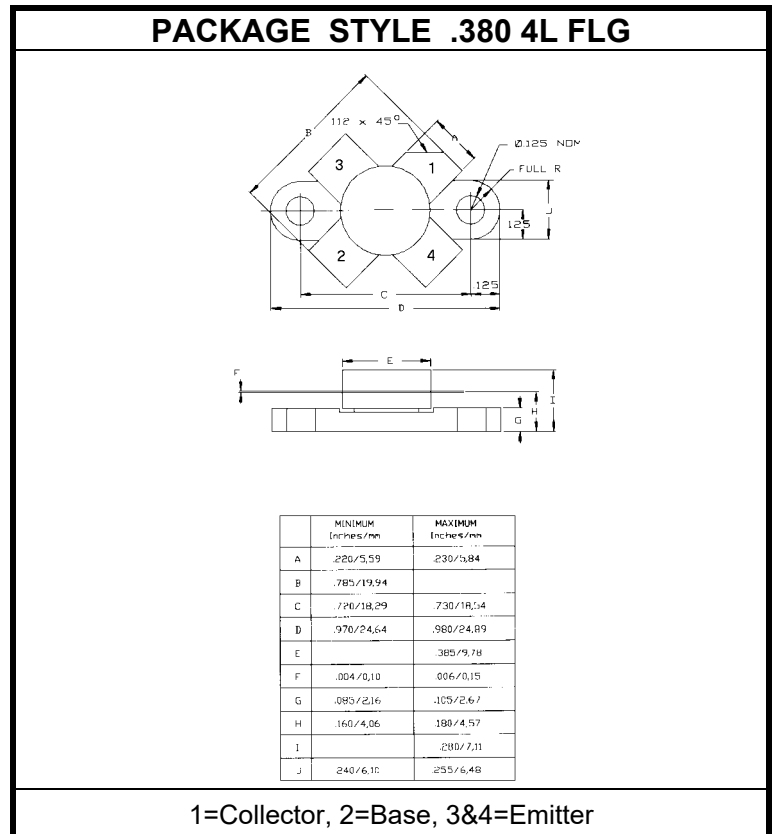
The **SD1015-06** is Planar transistor designed for 108-152 MHz. This device utilizes diffused emitter resistors to achieve infinite VSWR at rated operating conditions.

FEATURES:

- $P_G = 10$ dB min. at 30 W/150 MHz
- Common Emitter
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|---------------------------------|
| I_C | 10 A |
| V_{CBO} | 38 V |
| V_{CEO} | 18 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 10 W @ $T_C = 25^\circ C$ |
| T_J | $-65^\circ C$ to $+200^\circ C$ |
| T_{STG} | $-65^\circ C$ to $+150^\circ C$ |
| θ_{JC} | 44 $^\circ C/W$ |


CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|--|---------|---------|---------|-------|
| BV_{CEO} | $I_C = 200$ mA | 35 | | | V |
| BV_{CES} | $I_C = 200$ mA | 65 | | | V |
| BV_{EBO} | $I_E = 10$ mA | 4.0 | | | V |
| I_{CBO} | $V_E = 30$ V | | | 2.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 200$ mA | 20 | | | --- |
| C_{OB} | $V_{CB} = 30$ V $f = 1.0$ MHz | | | 250 | pF |
| P_G | $V_{CC} = 28$ V $P_{OUT} = 30$ W $f = 150$ MHz | 10 | | | dB |