

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

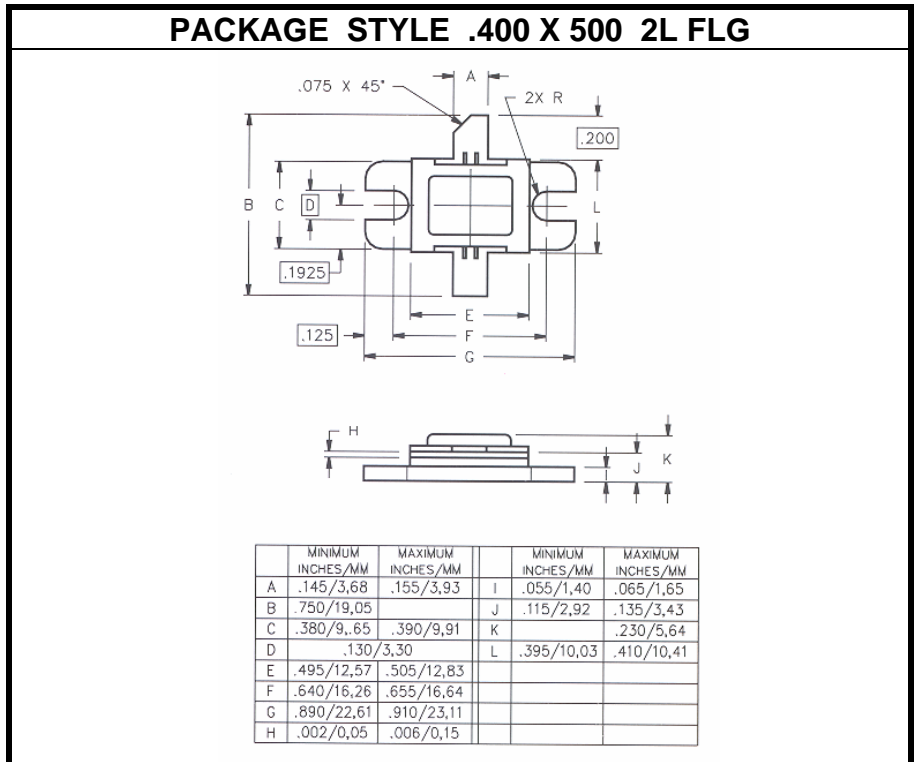
The **ASI SD1542-42** is a Common Base Device Designed for, IFF and DME Pulse Applications.

FEATURES INCLUDE:

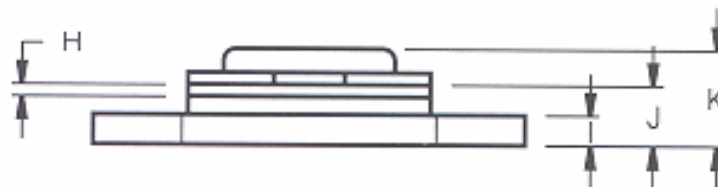
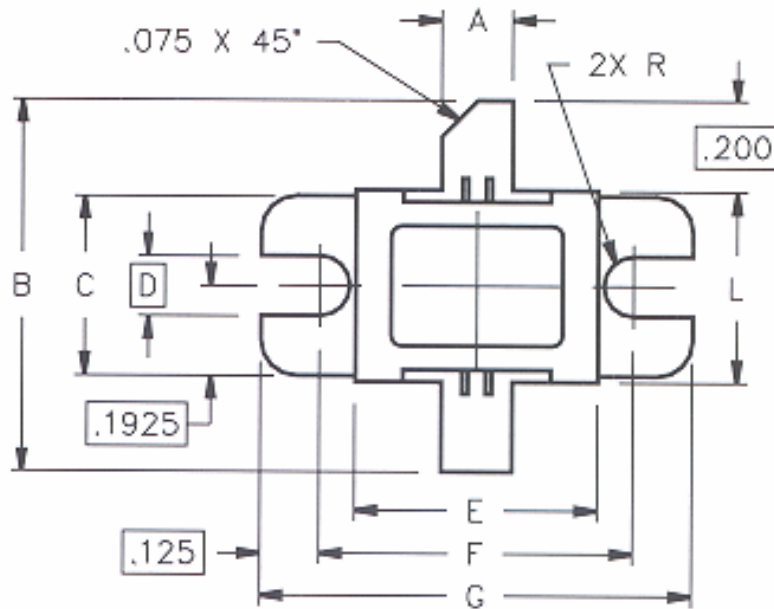
- Gold Metalization
- Input/Output Matching
- Hermetically Sealed

MAXIMUM RATINGS

| | |
|-------------------------|---------------------------------|
| I_C | 45 A |
| V_{CC} | 55 V |
| P_{DISS} | 1670 W @ T _C = 25 °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +200 °C |
| θ_{JC} | 0.06 °C/W |


CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|---|---------|---------|---------|-------|
| BV_{CBO} | I _C = 25 mA | 65 | | | V |
| BV_{CER} | I _C = 25 mA R _{BE} = 10 Ω | 65 | | | V |
| BV_{EBO} | I _E = 10 mA | 3.5 | | | V |
| I_{CES} | V _{CE} = 50 V | | | 60 | mA |
| h_{FE} | V _{CE} = 5.0 V I _C = 2.0 A | 10 | | 250 | --- |
| P_G | V _{CC} = 50 V P _{IN} = 150 W f = 1090 MHz PULSE | 6.0 | 6.6 | | dB |
| η_C | WIDTH = 10 μS DUTY CYCLE = 1.0% | 35 | 40 | | % |
| P_{OUT} | | 600 | 680 | | W |



| | MINIMUM INCHES/MM | MAXIMUM INCHES/MM | | MINIMUM INCHES/MM | MAXIMUM INCHES/MM |
|---|----------------------|----------------------|---|----------------------|----------------------|
| A | .145/3,68 | .155/3,93 | I | .055/1,40 | .065/1,65 |
| B | .750/19,05 | | J | .115/2,92 | .135/3,43 |
| C | .380/9,65 | .390/9,91 | K | | .230/5,64 |
| D | .130/3,30 | | L | .395/10,03 | .410/10,41 |
| E | .495/12,57 | .505/12,83 | | | |
| F | .640/16,26 | .655/16,64 | | | |
| G | .890/22,61 | .910/23,11 | | | |
| H | .002/0,05 | .006/0,15 | | | |