| | Cage Code: | Title: | Date: | Rev: | Model no: |
|---------------------------|------------|---------------------|---------|------|-----------|
| Hill Engineering Division | 02WLO | PRODUCT DATA | 7/16/01 | None | L54-005 |
| | | (subject to change) | | | |

This document describes the performance of a high power 1P5T switch. This is a HOT switched design i. e; switched while RF is on or off. Proper bias levels per item no.11 must be applied when operating this device.

| ITEM NO | CHARACTERISTIC | CONDITIONS | MIN | MAX | UNITS | COMMENTS |
|------------|----------------------|-------------------|------|--------|-------|--|
| 1 | POWER SPECIFICATION | IN BAND | | | | |
| 1.1 | FREQUENCY | | 8.0 | 11.0 | GHz | |
| 1.2 | PEAK POWER | | | 20 | Watts | |
| 1.3 | PULSE WIDTH | | - | CW | | |
| 2 | POWER SPECIFICATIONS | GUARD BAND | | | | |
| 2.1 | FREQUENCY | | 11.0 | 12.0 | GHz | |
| 2.2 | PEAK POWER | | | 10 | Watts | |
| 3 | POWER SPECIFICATIONS | OUT OF BAND | | | | |
| 3.1 | FREQUENCY | | | >12.0 | GHz | |
| 3.2 | PEAK POWER | | | 0.1 | Watt | |
| 4 | OPERATING FREQUENCY | | 8.0 | 11.0 | GHz | |
| 5 | INSERTION LOSS | | | 2.5 | dB | |
| 6 | ISOLATION | | | | | |
| 6.1 | | Input To Output | 45 | | dB | |
| 7 | PHASE | MATCH/TRACK | | | | NOT SPECIFIED |
| 8 | VSWR | | | | | |
| 8.1 | INPUT | | | 1.25:1 | | |
| 8.2 | OUTPUT | | | 1.25:1 | | |
| 8.3 | TERMINATION | | | 2.0:1 | | |
| 8.4 | PORTS NOT SELECTED | | | ~ | | INFINITY |
| 8.5 | SOURCE | | | 1.4:1 | | |
| 9 | HARMONICS & SPURS | | | | | |
| 9.1 | INTERNALLY GENERATED | | | | | NOT SPECIFIED |
| 10 | SWITCHING | | | | | |
| 10.1 | SWITCHING SPEED | TO 0.5 dB OF I.L. | | 10 | uS | |
| 10.2 | SWITCHING RATE | | | 50 | KHz | |
| 10.3 | VIDEO LEAKAGE | | | | Vpp | NOT SPECIFIED |
| 10.4 | COMMAND LOGIC TYPE: | TTL 6 bits | | | | |
| 10.5 | LOGIC TABLE | | | | | SEE OUTLINE DWG BELOW (6 THROW VERSION SHOWN) |
| 11 | D.C. POWER | | | | | (O THINOW VERSION SHOWIN) |
| | | | | | | |

| | Cage Code: | Title: | Date: | Rev: | Model no: |
|---------------------------|------------|---------------------|---------|------|-----------|
| Hill Engineering Division | 02WLO | PRODUCT DATA | 7/16/01 | None | L54-005 |
| | | (subject to change) | | | |

| ITEM NO | CHARACTERISTIC | CONDITIONS | MIN | MAX | UNITS | COMMENTS |
|------------|--------------------------|--------------|-----|-----|--------|---|
| 11.1 | POSITIVE BIAS VOLTAGE | | 4.8 | 5.5 | VDC | |
| 11.2 | NEGATIVE BIAS VOLTAGE | | -26 | -32 | VDC | |
| 11.3 | POSITIVE BIAS CURRENT | | | 450 | mA | |
| 11.4 | NEGATIVE BIAS CURRENT | | | 120 | mA | |
| 11.5 | VOLTAGE PROTECTION | | | | | THIS UNIT DOES NOT HAVE OVERVOLTAGE OR REVERSE POLARITY PROTECTION ON ANY BIAS PORT |
| 12 | CONNECTORS | | | | | |
| 12.1 | RF | | | | | SMAF |
| 12.2 | DC | | | | | DAM-9 |
| | | | | | | |
| 13 | MECHANICAL | | | | | |
| 13.1 | WEIGHT | | | 12 | OZ. | |
| 13.2 | OUTLINE | | | | inches | SEE DWG BELOW (6 THROW VERSION SHOWN) |
| 14 | ENVIRONMENTAL | WEATHERPROOF | | | | |
| 14.1 | OPERATING TEMPERATURE | | -40 | +70 | °C | |
| 14.2 | STORAGE TEMPERATURE | | -55 | +85 | °C | _ |
| 14.3 | VIBRATION LEVEL | | | | | Airborne |
| 14.4 | DEVICE SCREENING | LEVEL 2 | | | | QP-121 LEVEL 2 |

