

# PRODUCT DATA DRAWING

| REVISION HISTORY |             |       |          |
|------------------|-------------|-------|----------|
| REV              | DESCRIPTION | DATE  | APPROVED |
| F                | DCN 34664   | 10/06 | JMC      |
| G                | DCN 38051   | 03/11 | PJS      |
| H                | DCN 38193   | 04/11 | FED      |

**MATERIAL:**

BODIES, INSERTS, & COUPLING NUT:

STAINLESS STEEL PER AMS-5640, ALLOY UNS S30300, TYPE 1

LOCK RING & CONTACTS:

BERYLLIUM COPPER PER ASTM B196, ALLOY No. UNS C17300, TD04

SLEEVE:

BRASS PER ASTM B16, ALLOY UNS No. C36000

BEADS:

ULTEM 1000

BELLOWS SPRINGS:

ELECTRO-DEPOSITED GOLD OVER NICKEL

GASKET:

SILICONE RUBBER PER A-A-59588, CLASS 2B, GRADE 50/60

RESISTOR ELEMENT:

ALUMINUM NITRIDE SUBSTRATE WITH TANTALUM NITRIDE RESISTOR: GOLD PLATED TERMINATIONS

**FINISH:**

BODIES, INSERTS, & COUPLING NUT:

PASSIVATED PER AMS-2700, TYPE 2

CONTACTS:

GOLD PER ASTM B488, TYPE I, CODE C, CLASS 0.51; OVER NICKEL PER AMS-QQ-N-290, CLASS 1, .00005" MIN.

SLEEVE:

GOLD PER ASTM B 488, TYPE II, CODE C, CLASS 1.27; OVER NICKEL PER AMS-QQ-N-290, CLASS 1, .00005" MIN.

**PERFORMANCE:**

IMPEDANCE:  
FREQ. RANGE:  
VSWR:

50 OHMS  
DC TO 40.0 GHz  
1.30:1 MAX. DC TO 26.5 GHz  
1.40:1 MAX. 26.5 TO 40.0 GHz

OPERATING TEMP.:  
AVG. POWER:

-55°C TO +125°C  
0.5 WATT (POWER INPUT DERATED LINEARLY FROM 25°C TO 0.25 WATTS AT 135°C)

PEAK POWER:

100 WATTS (PEAK POWER FOR A DUTY CYCLE OF 5X10<sup>-4</sup> MAXIMUM PULSE DURATION OF 5 MICROSECONDS)

ENGAGEMENT/  
DISENGAGEMENT:

2 IN-LBS



**dB VALUE TO "XX" NUMBER CHART**

| dB VALUE | XX | dB VALUE | XX | dB VALUE | XX | dB VALUE | XX |
|----------|----|----------|----|----------|----|----------|----|
| .25      | 40 | 5.25     | 50 | 10.25    | 60 | 15.25    | 70 |
| .5       | 00 | 5.5      | 25 | 10.5     | 30 | 15.5     | 35 |
| .75      | 41 | 5.75     | 51 | 10.75    | 61 | 15.75    | 71 |
| 1        | 01 | 6        | 06 | 11       | 11 | 16       | 16 |
| 1.25     | 42 | 6.25     | 52 | 11.25    | 62 | 16.25    | 72 |
| 1.5      | 21 | 6.5      | 26 | 11.5     | 31 | 16.5     | 36 |
| 1.75     | 43 | 6.75     | 53 | 11.75    | 63 | 16.75    | 73 |
| 2        | 02 | 7        | 07 | 12       | 12 | 17       | 17 |
| 2.25     | 44 | 7.25     | 54 | 12.25    | 64 | 17.25    | 74 |
| 2.5      | 22 | 7.5      | 27 | 12.5     | 32 | 17.5     | 37 |
| 2.75     | 45 | 7.75     | 55 | 12.75    | 65 | 17.75    | 75 |
| 3        | 03 | 8        | 08 | 13       | 13 | 18       | 18 |
| 3.25     | 46 | 8.25     | 56 | 13.25    | 66 | 18.25    | 76 |
| 3.5      | 23 | 8.5      | 28 | 13.5     | 33 | 18.5     | 38 |
| 3.75     | 47 | 8.75     | 57 | 13.75    | 67 | 18.75    | 77 |
| 4        | 04 | 9        | 09 | 14       | 14 | 19       | 19 |
| 4.25     | 48 | 9.25     | 58 | 14.25    | 68 | 19.25    | 78 |
| 4.5      | 24 | 9.5      | 29 | 14.5     | 34 | 19.5     | 39 |
| 4.75     | 49 | 9.75     | 59 | 14.75    | 69 | 19.75    | 79 |
| 5        | 05 | 10       | 10 | 15       | 15 | 20       | 20 |

| dB VALUE    | ATTENUATION ACCURACY |               |
|-------------|----------------------|---------------|
|             | DC-26.5 GHz          | 26.5-40.0 GHz |
| 0-6 dB      | ±0.5 dB              | ±0.8 dB       |
| 6.25-10 dB  | ±0.6 dB              | ±0.8 dB       |
| 10.25-20 dB | ±0.6 dB              | ±1.0 dB       |

|   |   |   |  |
|---|---|---|--|
| MATERIAL: SEE NOTES   | DIMENSIONS ARE IN INCHES TOLERANCES:<br>FRACTIONAL: ±1/64 ANGULAR: X° ±1'0" X'X' ±15' | UNLESS OTHERWISE SPECIFIED<br>1) ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)<br>2) ALL DIMENSIONS ARE AFTER PLATING.<br>3) BREAK CORNERS & EDGES .005 R. MAX.<br>4) CHAM. 1ST & LAST THREADS.<br>5) SURFACE ROUGHNESS 63-MIL-STD-10.<br>6) DIA.'S ON COMMON CENTERS TO BE CONCENTRIC WITHIN .005 T.I.R.<br>7) REMOVE ALL BURRS | <b>SV Microwave, Inc.</b><br>2400 Centrepark West Drive, Suite 100<br>West Palm Beach, FL 33409<br>TITLE: <b>SVK JACK TO PLUG DC-40.0 GHz ATTENUATOR</b> |
| FINISH: SEE NOTES   | DECIMAL: X ±.030<br>.XX ±.010<br>.XXX ±.005   | INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994  |  |
| SURFACE AREA: N/A   | THIRD ANGLE PROJECTION  | DRAWN: MGT 05/27/04   | SIZE: <b>B</b> CAGE CODE: <b>95077</b> DWG. NO: <b>SF0915-6200-XX</b>  |
| PROPRIETARY<br>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SV MICROWAVE, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SV MICROWAVE, INC IS PROHIBITED. |   | CHECKED: DWC 11/14/01   | SCALE: 4:1   |
|   |   | APPROVED: DWC 11/14/01  | SHEET 1 OF 1   |