

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

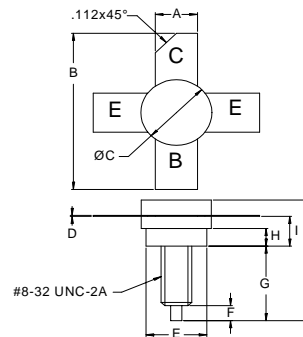
The **HF75-50S** is 50 V Class AB NPN Power transistor, designed for SSB & VHF Communacations.

**FEATURES INCLUDE:**

- Direct Replacement for **TH513**
- High Gain, 16 dB Typical @ 30 MHz
- Withstands Server Mismatch
- **Omnigold™** Metalization System
- 75 W P<sub>OUT</sub>
- 50 V OPERATIONS

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	3.25 A
<b>V<sub>CB</sub></b>	110 V
<b>V<sub>CE</sub></b>	55 V
<b>V<sub>EB</sub></b>	4.0 V
<b>P<sub>DISS</sub></b>	127 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	2.0 °C/W

**PACKAGE STYLE .380" 4L STUD**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 100 mA	110			V
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 200 mA	55			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA	4.0			V
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 6.0 V I <sub>C</sub> = 1.4 A	19		50	---
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 50 V f = 1.0 MHz			100	pF
<b>G<sub>PE</sub></b>	V <sub>CC</sub> = 50 V P <sub>IN</sub> = 3.0 W P <sub>OUT</sub> = 75 W <sub>PEP</sub>	14			dB
<b>η<sub>C</sub></b>	f <sub>1</sub> = 30.000 MHz, f <sub>2</sub> = 30.001 MHz	37			%
<b>IMD<sub>3</sub></b>				-30	dBc