NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **HF75-50S** is Designed for 50 Volt Class AB and Class C Power Amplifier Applications Operating in the 2 to 32 MHz HF Band.

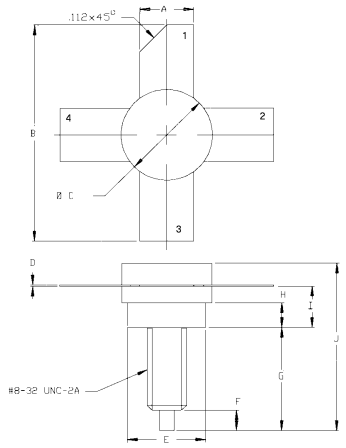
FEATURES INCLUDE:

- Direct Replacement for **TH513**
- High Gain, 16 dB Typical @ 30 MHz
- Withstands Server Mismatch

MAXIMUM RATINGS

I_C	3.25 A
V_{CB}	110 V
V_{CE}	55 V
V_{EB}	4.0 V
P_{DISS}	127 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.0 °C/W

PACKAGE STYLE .380" 4L STUD



	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

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I_C = 100 mA	110			V
BV_{CEO}	I_C = 200 mA	55			V
BV_{EBO}	I_E = 10 mA	4.0			V
I_{CES}	V_{CE} = 15 V			10	mA
h_{FE}	V_{CE} = 6.0 V I_C = 1.4 A	19		50	---
C_{ob}	V_{CB} = 50 V f = 1.0 MHz			100	pF
G_{PE}	V_{CC} = 50 V I_{CQ} = 50 mA P_{OUT} = 75 WPEP f = 30 MHz	14	16		dB
η_C		37			%
IMD_3				-30	dBc