

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

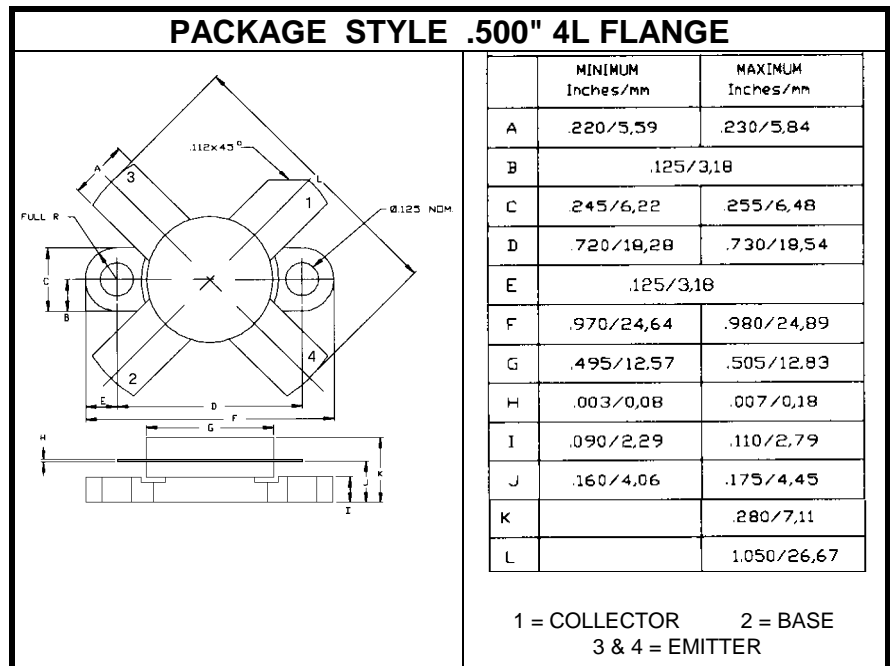
The **HF75-12** is Designed for 12.5 Volt Class AB & C HF Power Amplifier Applications in the 2 to 32 MHz Band.

FEATURES INCLUDE:

- Replacement for **MRF454** & **SD1405**
- $P_G = 13$ dB Min. @ 30MHz & 75W
- Withstands **20:1** Load **VSWR**

MAXIMUM RATINGS

I_C	20 A
V_{CB}	36 V
V_{CE}	18 V
V_{EB}	4.0 V
P_{DISS}	270 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	$0.65^\circ C/W$


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50$ mA	36			V
BV_{CES}	$I_C = 100$ mA	36			V
BV_{CEO}	$I_C = 100$ mA	18			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CES}	$V_{CE} = 15$ V			15	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 5.0$ A	20		200	---
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		350		pF
G_{PE}	$V_{CC} = 12.5$ V $I_{CQ} = 100$ mA $P_{OUT} = 75$ W(PEP) $f = 30.000$ & 30.001 MHz	13	14		dB
IMD_3		-30			dBc
η_C			55		%