

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

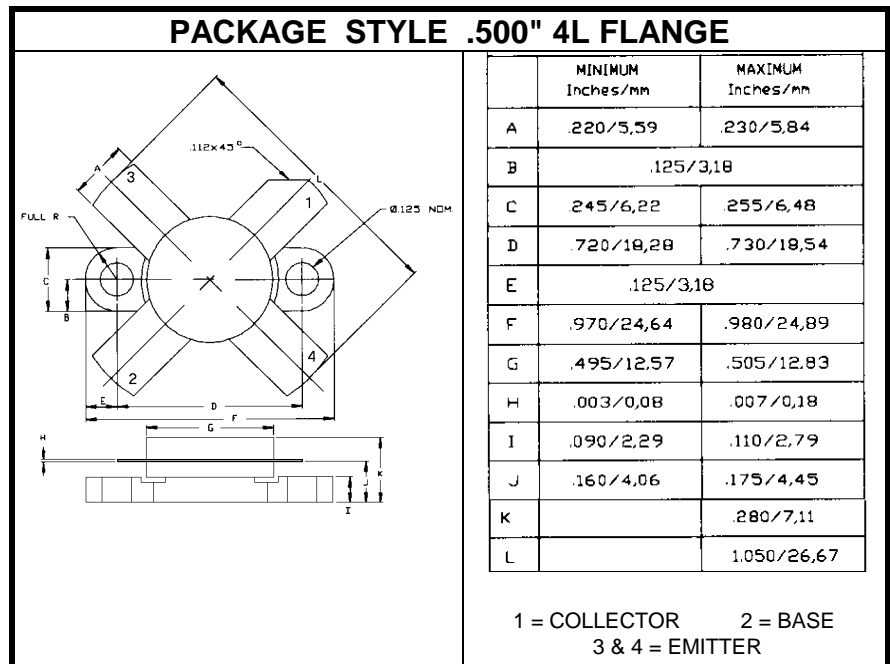
The **HF75-12** is Designed for 12.5 Volt Class AB & C HF Power Amplifier Applications in the 2 to 32 MHz Band.

**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 $+150^\circ C$
$\theta_{JC}$	$0.65^\circ C/W$


**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
$\eta_C$			55		%