

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**
- $P_G = 18$ dB Typical @ 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 @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	0.65°C/W

PACKAGE STYLE .500" 4L FLANGE		
	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5,59	.230/5,84
B	.125/3,18	
C	.245/6,22	.255/6,48
D	.720/18,28	.730/18,54
E	.125/3,18	
F	.970/24,64	.980/24,89
G	.495/12,57	.505/12,83
H	.003/0,08	.007/0,18
I	.090/2,29	.110/2,79
J	.160/4,06	.175/4,45
K		.280/7,11
L		1.050/26,67

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

CHARACTERISTICS $T_C = 25^\circ\text{C}$

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} IMD_3 h_C	$V_{CC} = 12.5$ V $I_{CQ} = 100$ mA $P_{OUT} = 75$ W(PEP) $f = 30.000$ & 30.001 MHz	13 -30	14 55		dB dBc %