



NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **HF50-12** is Designed for 12.5 Volt Class AB and Class C Power Amplifier Applications Operating in the 2 to 32 MHz HF Band.

FEATURES INCLUDE:

- High Gain, 16 dB Typical @ 30 MHz
- Emitter Ballasting
- Withstands Severe Mismatch

MAXIMUM RATINGS

I_C	10 A
V_{CB}	36 V
V_{CE}	18 V
V_{EB}	4.0 V
P_{DISS}	175 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
q_{JC}	1.0 °C/W

PACKAGE STYLE .380" 4L FLANGE

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5.59	.230/5.84
B	.765/19.94	
C	.726/18.29	.730/18.54
D	.970/24.64	.980/24.89
E		.385/9.78
F	.004/0.10	.006/0.15
G	.085/2.16	.105/2.67
H	.160/4.06	.180/4.57
I		.280/7.11
J	.240/6.10	.255/6.48

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	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			10	mA
h_{FE}	V _{CE} = 5.0 V I _C = 5.0 A	20			---
C_{ob}	V _{CB} = 12.5 V f = 1.0 MHz		200		pF
G_{PE}	V _{CC} = 12.5 V I _{CQ} = 50 mA P _{OUT} = 50 W(PEP)	15	16		dB
h_{IMD}	V _{CC} = 12.5 V I _{CQ} = 50 mA P _{OUT} = 50 W(PEP)		55		%
	f = 30 MHz		-30		dB

