

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

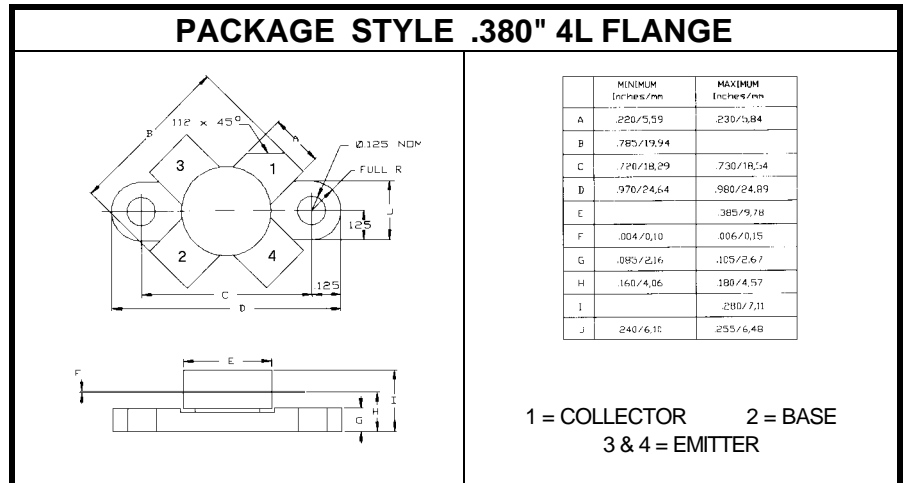
The **HF20-12F** is Designed for 12.5 V
Class AB & C HF Power Amplifier
Applications in the 2 to 32 MHz Band.

FEATURES INCLUDE:

- Replacement for **MRF433 & SD1285**
- $P_G = 18$ dB Typical at 30MHz & 20W
- Withstands **20:1 Load VSWR**

MAXIMUM RATINGS

I_C	4.5 A
V_{CB}	36 V
V_{CE}	18 V
V_{EB}	4.0 V
P_{DISS}	80 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
q_{JC}	2.2 $^\circ C/W$


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50$ mA	36			V
BV_{CES}	$I_C = 50$ mA	36			V
BV_{CEO}	$I_C = 50$ mA	18			V
BV_{EBO}	$I_E = 5.0$ mA	4.0			V
I_{CES}	$V_{CE} = 15$ V			5	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		200	
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		100		pF
G_{PE}	$V_{CC} = 12.5$ V $I_{CQ} = 25$ mA $P_{OUT} = 20$ W (PEP)	15	18		dB
IMD_3	$f = 30.000$ & 30.001 MHz	-30			dBc
h_c			55		%