

NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **MRF586** is a High Frequency Transistor Designed for High Gain Low Noise CATV, and MATV Amplifier Applications.

MAXIMUM RATINGS

I_C	200 mA
V_{CE}	17 V
P_{DISS}	2.5 W @ T _C = 50 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	70 °C/W

PACKAGE STYLE TO-39

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.200 / 5.080	
B	.029 / 0.740	.045 / 1.140
C	.028 / 0.720	.034 / 0.860
D	.335 / 8.510	.370 / 9.370
E	.305 / 7.750	.335 / 8.500
F	.240 / 6.100	.260 / 6.600
G	.500 / 12.700	
H	.016 / 0.407	.020 / 0.508

1 = EMITTER 2 = BASE
3 = COLLECTOR(CASE)

CHARACTERISTICS T_A = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 5.0 mA	17			V
BV_{CBO}	I _C = 1.0 mA	34			V
BV_{EBO}	I _E = 100 μA	2.5			V
I_{CBO}	V _{CB} = 10 V			50	μA
h_{FE}	V _{CE} = 5.0 V I _C = 50 mA	50		200	---
f_t	V _{CE} = 15 V I _C = 90 mA f = 500 MHz		4500		MHz
C_{OB}	V _{CB} = 10 V f = 1.0 MHz			2.2	pF
NF	V _{CE} = 15 V I _C = 90 mA f = 300 MHz		3.0		dB
T_{B3}	V _{CE} = 15 V I _C = 90 mA f = 500 MHz		-65		dB
D_{IN}	V _{CE} = 15 V I _C = 90 mA f = 500 MHz		-120		dBμV
G_{Umax}	V _{CE} = 15 V I _C = 90 mA f = 500 MHz		14.5		dB