

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **2N5070** is Designed for High Power Linear Amplifier Application in the 2.0 to 75 MHz Range.

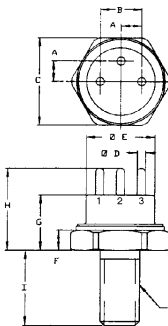
FEATURES INCLUDE:

Emitter Ballasted
Common Emitter Package

MAXIMUM RATINGS

I_C	3.3 A 10 A (PEAK)
V_{CE}	30 V
P_{DISS}	70 W @ $T_C = 25^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
JC	2.5°C/W

PACKAGE STYLE TO-60



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

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.090/2.29	.110/2.79
B	.185/4.70	.215/5.46
C	.420/10.67	.440/11.18
D	.030/0.76	.046/1.17
E	.320/8.13	.360/9.14
F	.090/2.29	.135/3.43
G	.215/5.46	.320/8.13
H		.480/12.19
I	.420/10.67	.455/11.56

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 200\text{ mA}$	30			V
BV_{CER}	$I_C = 200\text{ mA}$ $R_{BE} = 5.0$	40			V
I_{CEO}	$V_{CE} = 30\text{ V}$			5.0	mA
I_{CEV}	$V_{CE} = 60\text{ V}$ $V_{BE} = -1.5\text{ V}$ $V_{CE} = 60\text{ V}$ $V_{BE} = -1.5\text{ V}$ $T_C = 150^\circ\text{C}$			10 10	mA
I_{CBO}	$V_{CB} = 60\text{ V}$			10	mA
I_{EBO}	$V_{EB} = 4.0\text{ V}$			10	mA
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 1.0\text{ A}$ $I_C = 3.0\text{ A}$	10 10		100 100	---
C_{ob}	$V_{CB} = 30\text{ V}$ $f = 1.0\text{ MHz}$			85	pF
f_t	$V_{CE} = 15\text{ V}$ $I_C = 1.0\text{ A}$ $f = 50\text{ MHz}$	100			MHz
P_{in}	$V_{CE} = 28\text{ V}$ $P_{out} = 25\text{ W(PEP)}$ $Z_g = 50$ $f_1 = 30\text{ MHz}$ $f_2 = 30.001\text{ MHz}$	40		1.25	W
IMD				-30	% dB

Note : Above parameters , ratings , limits and conditions are subject to change .