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2N5070

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

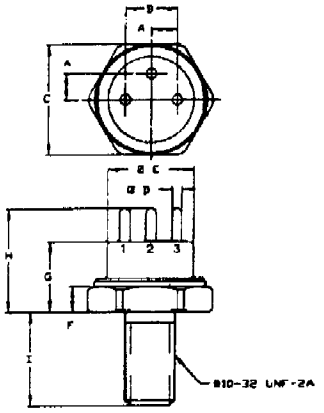
FEATURES INCLUDE:

- 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 °C
T_{STG}	-65 °C to +200 °C
θ_{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 °C

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