SYNTEZ MICROELECTRONICS

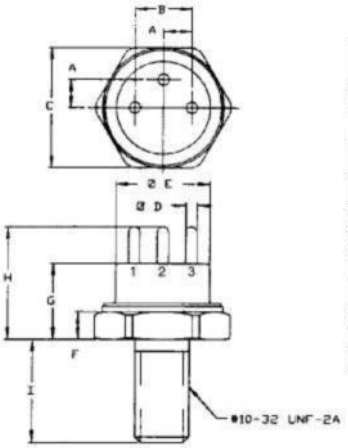
2N3375

SILICON BIPOLAR NPN POWER TRANSISTOR
3 W, in the 130 – 400 MHz Frequency Range

The silicon bipolar n-p-n transistor is designed for Class A,B,C Amplifier,Oscillator and Driver Applications Covering the VHF-UHF Region.

Features (At 400 MHz):
- Output Power: 3 W
- Power Gain: 4.8 dB Min
- Efficiency: 40% Min

PACKAGE STYLE TO- 60



	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

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

Absolute Maximum Ratings

Parameters	Sym	Value	Unit
Collector–Emitter Voltage	V_{CEO}	40	V_{DC}
Collector-Base Voltage	V_{CBO}	65	V_{DC}
Emitter–Base Voltage	V_{EBO}	4	V_{DC}
Collector Current	$I_{C(max)}$	1.5	A_{DC}
Operation Junction Temperature	T_j	-65 ÷ +200	ºC
Storage Temperature Range	T_{STG}	-65 ÷ +150	ºC
Thermal Resistance, Junction to Case	$R_{\theta JC}$	15	°C/W
Total Power Dissipation, T_C=25ºC	P_D	11.6	W

Parameters

Parameter	Symbol	Min.	Typ.	Max.	Unit
Collector–Emitter Breakdown Voltage (I_C = 200 mA, I_B =0 A)	$V_{(BR)CEO}$	40	—	—	V_{DC}
Collector-Base Breakdown Voltage (I_C = 0.5 mA, V_{BE} =0 V)	$V_{(BR)CBO}$	65			V_{DC}
Emitter–Base Breakdown Voltage (I_E = 0.25 mA, I_C = 0 A)	$V_{(BR)EBO}$	4	—	—	V_{DC}
Collector– Base Leakage Current (V_{CB} = 30 V, I_E =0 A)	I_{CBO}	—	—	0.1	mA_{DC}
DC Current Gain (V_{CE} = 5 V, I_C = 250 mA)	h_{FE}	10	—	100	
Output Capacitance (V_{CB} = 30 V, I_E = 0 A, f = 1 MHz)	C_{OB}	—	—	10	pF
Power Gain (V_{CE} = 28 V, P_{OUT} = 3 W, f = 400 MHz)	Gp	4.8	—	—	dB
Drain Efficiency (V_{CE} = 28 V, P_{OUT} = 3 W, f = 400 MHz)	η	40	—	—	%

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Specification is subject to change without notice