ALN68135

NPN SILICON LOW NOISE RF TRANSISTOR

DESCRIPTION:

The **ALN68135** is a Common Emitter Device Designed for Low Noise Class A Amplifier Applications up to 4.0 GHz.

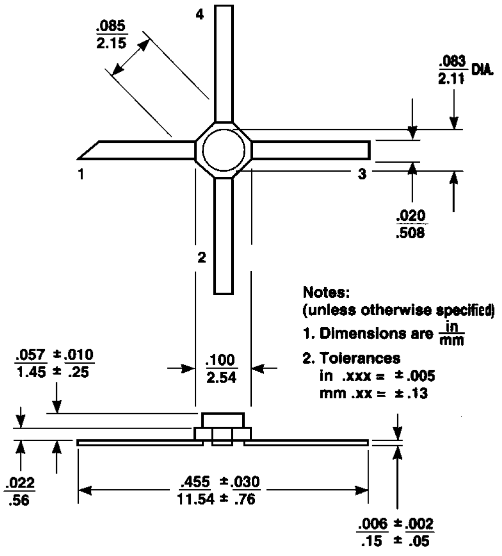
FEATURES INCLUDE:

- **N_F** = 1.6 dB Typical @ 2 GHz
- **$|S21|^2$** = 12 dB Typical @ 2 GHz
- Replacement for **NE68135**

MAXIMUM RATINGS

I_C	40 mA
V_{CBO}	20 V
V_{CEO}	12 V
V_{EBO}	1.5 V
P_{DISS}	290 mW @ $T_A \leq 25\ ^{O}C$
T_J	-65 ^{O}C to +200 ^{O}C
T_{STG}	-65 ^{O}C to +150 ^{O}C
θ_{JC}	600 $^{O}C/W$

PACKAGE STYLE SS35



1 = COLLECTOR 2 & 4 = EMITTER 3 = BASE

CHARACTERISTICS $T_C = 25\ ^{O}C$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{CBO}	V_{CB} = 8.0 V					200	**nA**
I_{EBO}	V_{EB} = 1.0 V					1.0	**µA**
h_{FE}	V_{CE} = 8.0 V	I_C = 7.0 mA		50		250	**---**
C_{OB}	V_{CB} = 10 V				0.2	0.7	**pF**
f_t	V_{CE} = 8.0 V	I_C = 20 mA	f = 1.0 GHz	8.0	9.0		**GHz**
$\|S21\|^2$	V_{CE} = 8.0 V	I_C = 20 mA	f = 2.0 GHz	9	11		**dB**
NF	V_{CE} = 8 V	I_C = 7.0 mA	f = 2.0 GHz		1.6	2.3	**dB**
GA				11	12		