

NPN SILICON LOW NOISE RF TRANSISTOR

DESCRIPTION:

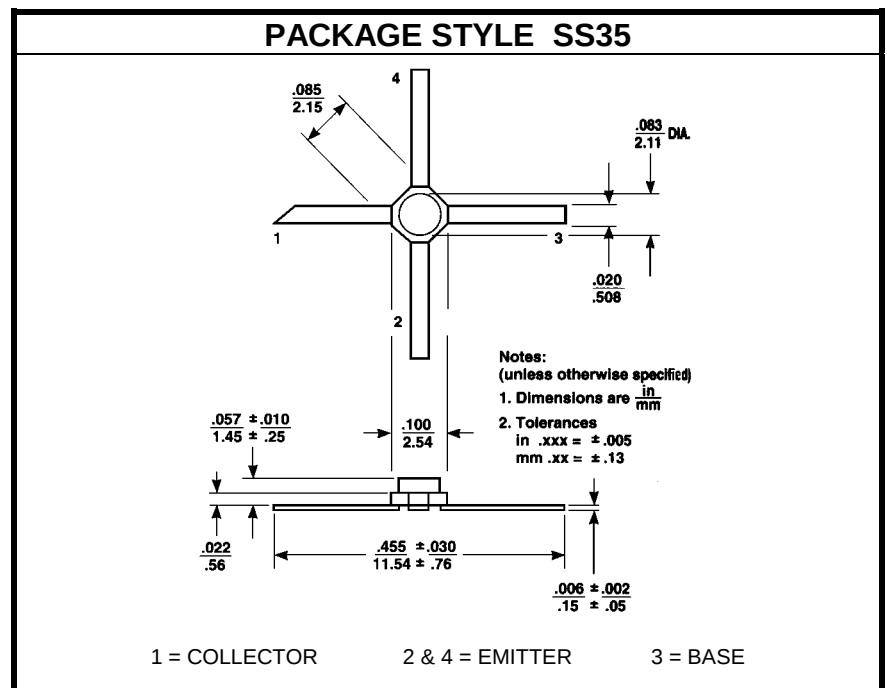
The **ALN68135** is a Common Emitter Device Designed for Low Noise Class A Amplifier Applications up to 4.0 GHz.

FEATURES INCLUDE:

- $N_F = 1.6$ dB Typical @ 2 GHz
- $|S_{21}|^2 = 12$ 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 @ $T_A \leq 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	600 $^\circ\text{C/W}$



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

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
S ₂₁ ²	V _{CE} = 8.0 V	I _C = 20 mA	f = 2.0 GHz	9	11		dB
NF GA	V _{CE} = 8 V	I _C = 7.0 mA	f = 2.0 GHz	11	1.6 12	2.3	dB