

NPN SILICON TRANSISTOR

2SC2026

DESCRIPTION Suitable for low noise amplifier in the VHF to UHF band.

- FEATURES**
- NF 3.0 dB TYP. @f = 500 MHz
 - G_{pe} 15 dB TYP. @f = 500 MHz
 - f_T 2.0 GHz TYP.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature -55 to +150 °C
 Junction Temperature +150 °C Maximum

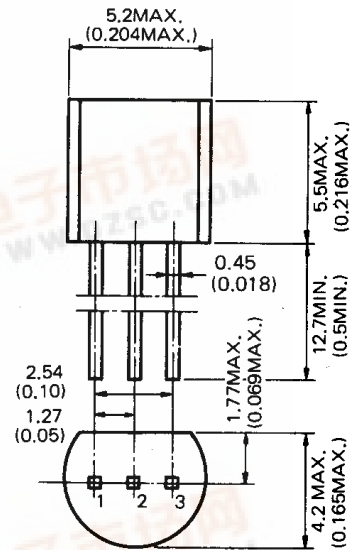
Maximum Power Dissipation (Ta = 25 °C)

Total Power Dissipation 250 mW

Maximum Voltages and Current (Ta=25 °C)

V_{CBO} Collector to Base Voltage 30 V
 V_{CEO} Collector to Emitter Voltage 14 V
 V_{EBO} Emitter to Base Voltage 3.0 V
 I_C Collector Current 50 mA

PACKAGE DIMENSIONS
in millimeters (inches)



1. BASE EIAJ : SC-43A
 2. EMITTER JEDEC : TO-92
 3. COLLECTOR IEC : PA33

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE}	DC Current Gain	25	80	200		$V_{CE}=10\text{ V}, I_C=10\text{ mA}$
f_T	Gain Bandwidth Product	1.5	2.0		GHz	$V_{CE}=10\text{ V}, I_E=10\text{ mA}$
C_{ob}	Output Capacitance		0.75	1.1	pF	$V_{CB}=10\text{ V}, I_E=0, f=1.0\text{ MHz}^*$
G_{pe}	Power Gain	13	15		dB	$V_{CE}=10\text{ V}, I_C=10\text{ mA}, f=500\text{ MHz}$
NF	Noise Figure		3.0	4.0	dB	$V_{CE}=10\text{ V}, I_C=3.0\text{ mA}, f=500\text{ MHz}, R_G=50\ \Omega$
I_{CBO}	Collector Cutoff Current			0.1	μA	$V_{CB}=15\text{ V}, I_E=0$
I_{EBO}	Emitter Cutoff Current			0.1	μA	$V_{EB}=2.0\text{ V}, I_C=0$

* The emitter terminal should be connected to the guard terminal of the three-terminal capacitance bridge.