



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SA950

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

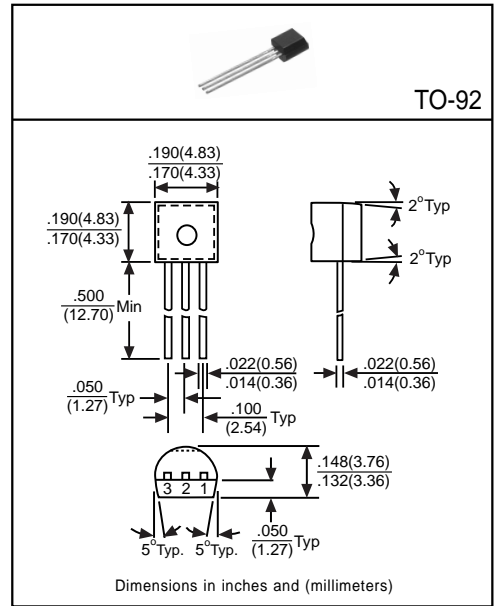
Designed for low-frequency power amplifier applications.

Pinning

- 1 = Emitter
- 2 = Collector
- 3 = Base

Absolute Maximum Ratings (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-35	V
Collector-Emitter Voltage	V _{CE0}	-30	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current	I _C	-800	mA
Total Power Dissipation	P _D	600	mW
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-55 to +150	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CB0}	-35	-	-	V	I _C =-100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CE0}	-30	-	-	V	I _C =-2mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}	-5	-	-	V	I _E =-100μA, I _C =0
Collector Cutoff Current	I _{CBO}	-	-	-0.1	μA	V _{CB} =-35V, I _E =0
Emitter Cutoff Current	I _{EBO}	-	-	-0.1	μA	V _{EB} =-5V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-0.28	-0.7	V	I _C =-500mA, I _B =-20mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	-1.3	V	I _C =-500mA, I _B =-20mA
DC Current Gain ⁽¹⁾	h _{FE1}	45	-	-	-	I _C =-5mA, V _{CE} =-1V
	h _{FE2}	100	-	320	-	I _C =-100mA, V _{CE} =-1V
	h _{FE3}	40	-	-	-	I _C =-500mA, V _{CE} =-1V
Transition Frequency	f _T	-	120	-	MHz	I _C =-10mA, V _{CE} =-5V
Output Capacitance	C _{ob}	-	19	-	pF	V _{CE} =-10V, f=1MHz, I _E =0

(1) Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification of h_{FE2}

Rank	O	Y
Range	100~200	160~320