



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SA733

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

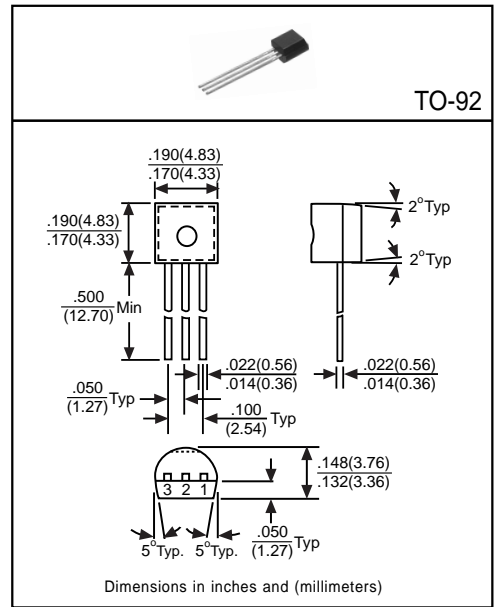
Designed for use in driver stage of AF amplifier applications.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-60	V
Collector-Emitter Voltage	V _{CE0}	-50	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current	I _C	-100	mA
Base Current	I _B	-20	mA
Total Power Dissipation	P _D	250	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}	-60	-	-	V	I _C =-100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CE0}	-50	-	-	V	I _E =-1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}	-5	-	-	V	I _E =-10μA, I _C =0
Collector Cutoff Current	I _{CBO}	-	-	-0.1	μA	V _{CB} =-60V, 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)}	-	-0.18	-0.3	V	I _C =-100mA, I _B =-10mA
Base-Emitter On Voltage	V _{BE(on)}	-0.55	-0.62	-0.7	V	I _C =-1mA, V _{CE} =-6V
DC Current Gain ⁽¹⁾	h _{FE}	90	200	600	-	I _C =-1mA, V _{CE} =-6V
Transition Frequency	f _T	100	180	-	MHz	I _C =-10mA, V _{CE} =-6V
Output Capacitance	C _{ob}	-	4.5	6	pF	V _{CB} =-10V, I _E =0, f=1MHz

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

Classification of h_{FE}

Rank	R	Q	P	K
Range	90~180	135~270	200~400	300~600