

DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SD667A

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

Description

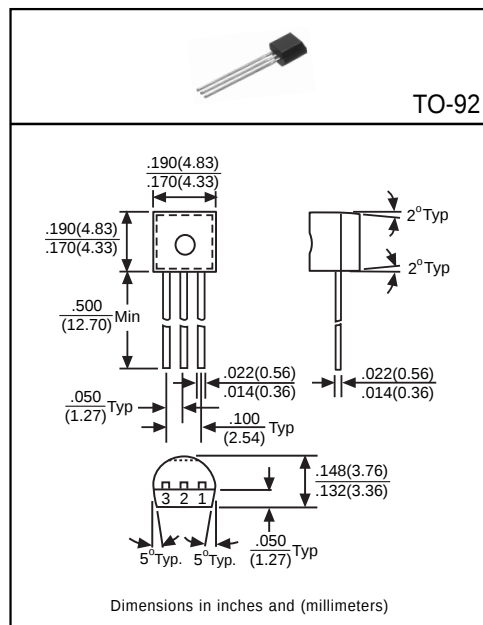
Designed for low frequency power amplifier applications.

Pinning

1 = Emitter
2 = Collector
3 = Base

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	120	V
Collector-Emitter Voltage	V _{CE0}	100	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current (DC)	I _C	1	A
Collector Current (pulse)	I _C	2	A
Total Power Dissipation	P _D	900	mW
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-55 to +150	°C



Electrical Characteristics

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Volatge	BV _{CBO}	120	-	-	V	I _c =10μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	100	-	-	V	I _c =1mA, I _B =0
Emitter-Base Breakdown Volatge	BV _{EBO}	5	-	-	V	I _E =10μA, I _c =0
Collector Cutoff Current	I _{CBO}	-	-	10	μA	V _{CB} =100V, I _E =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	1	V	I _c =500mA, I _B =50mA
Base-Emitter On Voltage ⁽¹⁾	V _{BE(on)}	-	-	1.5	V	I _c =150mA, V _{CE} =5V
DC Current Gain ⁽¹⁾	h _{FE1}	60	-	200	-	I _c =150mA, V _{CE} =5V
	h _{FE2}	30	-	-	-	I _c =500mA, V _{CE} =5V
Transition Frequency	f _T	-	140	-	MHz	I _c =150mA, V _{CE} =5V
Output Capacitance	C _{ob}	-	12	-	pF	V _{CB} =10V, f=1MHz, I _E =0

(1)Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$

Classification of hFE

Rank	B	C
Range	60~120	100~200