



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

DXTA92

## TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

## Description

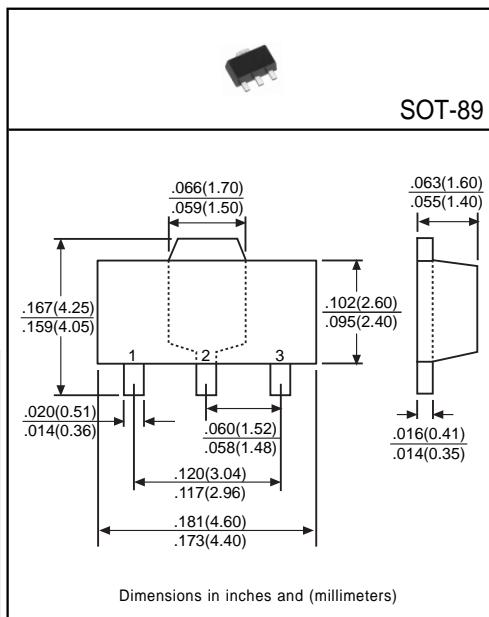
Designed for application as a video output to drive color CRT, or as a dialer circuit in electronics telephone.

## Pinning

- 1 = Base  
2 = Collector  
3 = Emitter

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-300	V
Collector-Emitter Voltage	$V_{CE0}$	-300	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-500	mA
Total Power Dissipation	$P_D$	1	W
Junction Temperature	$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$



## Electrical Characteristics

(Ratings at  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	$BV_{CB0}$	-300	-	-	V	$I_C=-100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	-300	-	-	V	$I_C=-1\text{mA}$
Emitter-Base Breakdown Voltage	$BV_{EB0}$	-5	-	-	V	$I_E=-10\mu\text{A}$
Collector Cutoff Current	$I_{CB0}$	-	-	-250	nA	$V_{CB}=-200\text{V}$
Emitter Cutoff Current	$I_{EB0}$	-	-	-100	nA	$V_{EB}=-3\text{V}$
Collector-Emitter Saturation Voltage <sup>(1)</sup>	$V_{CE(sat)}$	-	-	-0.5	V	$I_C=-20\text{mA}$ , $I_B=-2\text{mA}$
Base-Emitter Saturation Voltage <sup>(1)</sup>	$V_{BE(sat)}$	-	-	-0.9	V	$I_C=-20\text{mA}$ , $I_B=-2\text{mA}$
DC Current Gain <sup>(1)</sup>	$h_{FE1}$	25	-	-	-	$I_C=-1\text{mA}$ , $V_{CE}=-10\text{V}$
	$h_{FE2}$	40	-	-	-	$I_C=-10\text{mA}$ , $V_{CE}=-10\text{V}$
	$h_{FE3}$	25	-	-	-	$I_C=-30\text{mA}$ , $V_{CE}=-10\text{V}$
Transition Frequency	$f_T$	50	-	-	MHz	$V_{CE}=-20\text{V}$ , $I_C=-10\text{mA}$ , $f=100\text{MHz}$
Output Capacitance	$C_{ob}$	-	-	6	pF	$V_{CB}=-20\text{V}$

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