



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MPSA92M

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

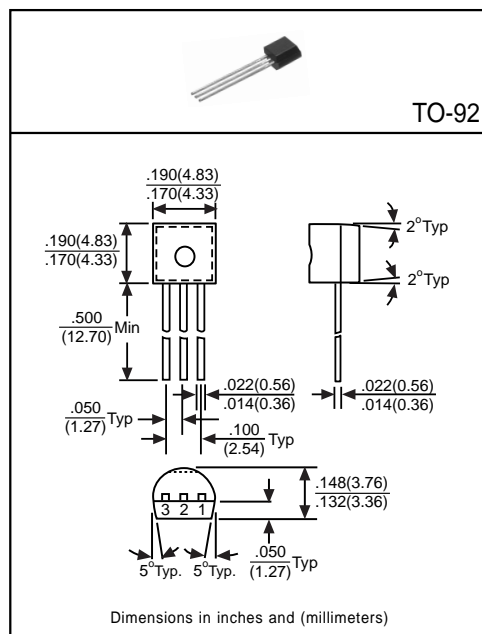
Designed for use as a video output to drive color CRT, or as a dialer circuit in electronic telephone.

Pinning

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

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	-800	mA
Total Power Dissipation	P_D	625	mW
Junction Temperature	T_J	+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$



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}	-300	-	-	V	$I_C=-100\mu\text{A}$, $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CE0}	-300	-	-	V	$I_C=-1\text{mA}$, $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EB0}	-5	-	-	V	$I_E=-10\mu\text{A}$, $I_C=0$
Collector Cutoff Current	I_{CE0}	-	-	-5	μA	$V_{CE}=-300\text{V}$, $I_B=0$
Emitter Cutoff Current	I_{EB0}	-	-	-0.1	μA	$V_{EB}=-3\text{V}$, $I_C=0$
Collector-Emitter Saturation Voltage ⁽¹⁾	$V_{CE(sat)1}$	-	-0.15	-	V	$I_C=-30\text{mA}$, $I_B=-1\text{mA}$
	$V_{CE(sat)2}$	-	-	-0.7	V	$I_C=-100\text{mA}$, $I_B=-10\text{mA}$
Base-Emitter Saturation Voltage ⁽¹⁾	$V_{BE(sat)1}$	-	-	-0.9	V	$I_C=-20\text{mA}$, $I_B=-2\text{mA}$
	$V_{BE(sat)2}$	-	-	-1	V	$I_C=-100\text{mA}$, $I_B=-10\text{mA}$
DC Current Gain ⁽¹⁾	h_{FE1}	80	-	-	-	$I_C=-10\text{mA}$, $V_{CE}=-10\text{V}$
	h_{FE2}	80	-	-	-	$I_C=-100\text{mA}$, $V_{CE}=-10\text{V}$
	h_{FE3}	40	-	-	-	$I_C=-200\text{mA}$, $V_{CE}=-10\text{V}$
Transition Frequency	f_T	50	-	-	MHz	$I_C=-10\text{mA}$, $V_{CE}=-20\text{V}$, $f=100\text{MHz}$

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