



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

DXT5401

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

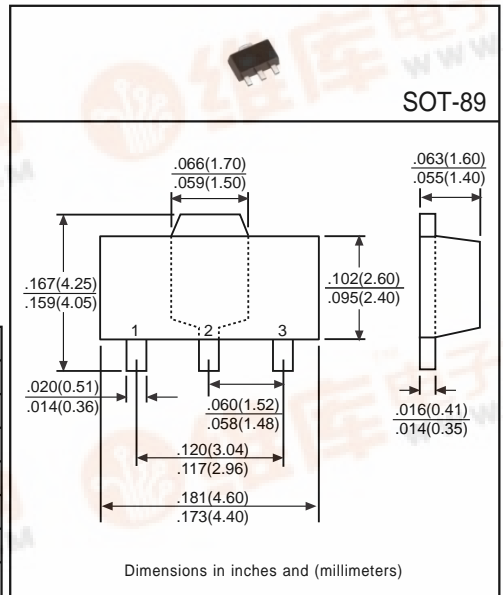
Designed for general purpose applications requiring high breakdown voltages.

Pinning

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

Absolute Maximum Ratings(T<sub>A</sub>=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	-160	V
Collector-Emitter Voltage	V <sub>CE0</sub>	-150	V
Emitter-Base Voltage	V <sub>EB0</sub>	-5	V
Collector Current	I <sub>C</sub>	-500	mA
Total Power Dissipation	P <sub>D</sub>	1	W
Junction Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-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 <sub>CB0</sub>	-160	-	-	V	I <sub>C</sub> =-100μA
Collector-Emitter Breakdown Voltage	BV <sub>CE0</sub>	-150	-	-	V	I <sub>C</sub> =-1mA
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	-5	-	-	V	I <sub>E</sub> =-10μA
Collector Cutoff Current	I <sub>CB0</sub>	-	-	-50	nA	V <sub>CB</sub> =-120V
Emitter Cutoff Current	I <sub>EB0</sub>	-	-	-50	nA	V <sub>EB</sub> =-5V
Collector-Emitter Saturation Voltage <sup>(1)</sup>	V <sub>CE(sat)1</sub>	-	-	-0.2	V	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA
	V <sub>CE(sat)2</sub>	-	-	-0.5	V	I <sub>C</sub> =-50mA, I <sub>B</sub> =-5mA
Base-Emitter Saturation Voltage <sup>(1)</sup>	V <sub>BE(sat)1</sub>	-	-	-1	V	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA
	V <sub>BE(sat)2</sub>	-	-	-1	V	I <sub>C</sub> =-50mA, I <sub>B</sub> =-5mA
DC Current Gain <sup>(1)</sup>	hFE1	50	-	-	-	I <sub>C</sub> =-1mA, V <sub>CE</sub> =-5V
	hFE2	60	-	240	-	I <sub>C</sub> =-10mA, V <sub>CE</sub> =-5V
	hFE3	50	-	-	-	I <sub>C</sub> =-50mA, V <sub>CE</sub> =-5V
Transition Frequency	f <sub>T</sub>	100	-	-	MHz	V <sub>CE</sub> =-10V, f=100MHz, I <sub>C</sub> =-10mA
Output Capacitance	C <sub>ob</sub>	-	-	6	pF	V <sub>CB</sub> =-10V, f=1MHz

<sup>(1)</sup> Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

