



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MJD32C

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

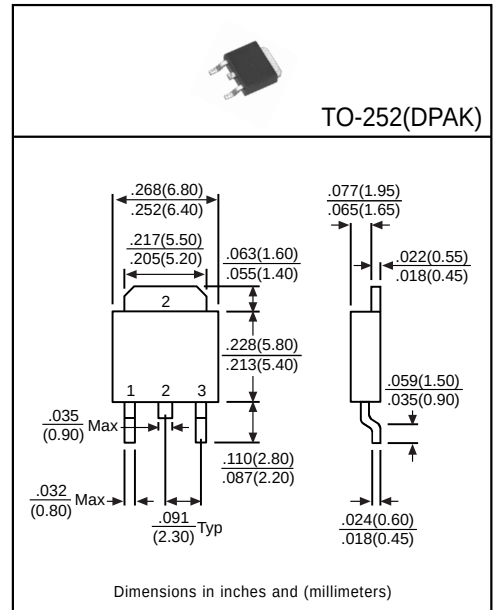
Designed for use in general purpose amplifier and switching applications.

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}	-100	V
Collector-Emitter Voltage	V_{CE0}	-100	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-3	A
Total Power Dissipation($T_C=25^{\circ}\text{C}$)	P_D	15	W
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}	-100	-	-	V	$I_C=-1\text{mA}$, $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CE0}	-100	-	-	V	$I_C=-30\text{mA}$, $I_B=0$
Collector Cutoff Current	I_{CES}	-	-	-20	μA	$V_{CE}=-100\text{V}$, $V_{BE}=0$
	I_{CEO}	-	-	-50	μA	$V_{CE}=-60\text{V}$, $I_B=0$
Emitter Cutoff Current	I_{EBO}	-	-	-1	mA	$V_{EB}=-5\text{V}$, $I_C=0$
Collector-Emitter Saturation Voltage ⁽¹⁾	$V_{CE(sat)}$	-	-	-1.2	V	$I_C=-3\text{A}$, $I_B=-375\text{mA}$
Base-Emitter On Voltage ⁽¹⁾	$V_{BE(on)}$	-	-	-1.8	V	$I_C=-3\text{A}$, $V_{CE}=-4\text{V}$
DC Current Gain ⁽¹⁾	h_{FE1}	25	-	-	-	$I_C=-1\text{A}$, $V_{CE}=-4\text{V}$
	h_{FE2}	10	-	50	-	$I_C=-3\text{A}$, $V_{CE}=-4\text{V}$
Transition Frequency	f_T	3	-	-	MHz	$I_C=-0.5\text{A}$, $V_{CE}=-10\text{V}$, $f=1\text{MHz}$

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