



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

1772

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

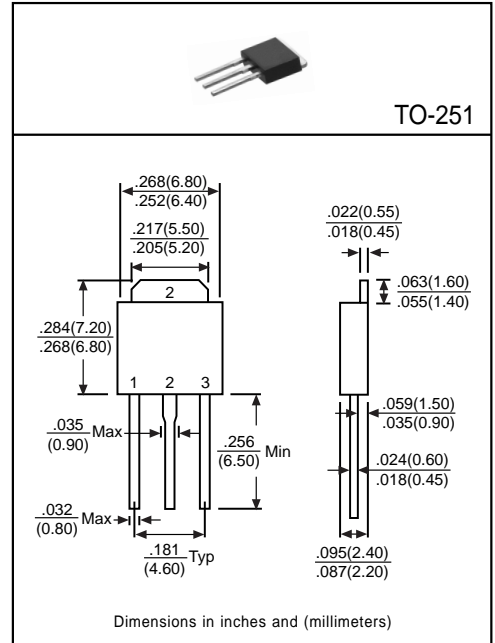
Designed for use in output stage of 10W audio amplifier, voltage regulator, DC-DC converter, and relay driver.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CE0}	-30	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current (DC)	I _C	-3	A
Collector Current (pulse)	I _C	-7	A
Base Current (DC)	I _B	-600	mA
Total Power Dissipation(T _C =25°C)	P _D	10	W
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-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 _{CB0}	-40	-	-	V	I _C =-100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CE0}	-30	-	-	V	I _C =-1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}	-5	-	-	V	I _E =-10μA, I _C =0
Collector Cutoff Current	I _{CB0}	-	-	-1	μA	V _{CB} =-30V, I _E =0
Emitter Cutoff Current	I _{EB0}	-	-	-1	μA	V _{EB} =-3V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-0.3	-0.5	V	I _C =-2A, I _B =-0.2A
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-1	-2	V	I _C =-2A, I _B =-0.2A
DC Current Gain ⁽¹⁾	hFE1	30	-	-	-	I _C =-20mA, V _{CE} =-2V
	hFE2	100	-	500	-	I _C =-1A, V _{CE} =-2V
Transition Frequency	f _T	-	80	-	MHz	I _C =-0.1A, V _{CE} =-5V, f=100MHz
Output Capacitance	C _{ob}	-	55	-	pF	V _{CB} =-10V, f=1MHz

(1)Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification of hFE2

Rank	Q	P	E
Range	100~200	160~320	250~500