



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2N2955

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

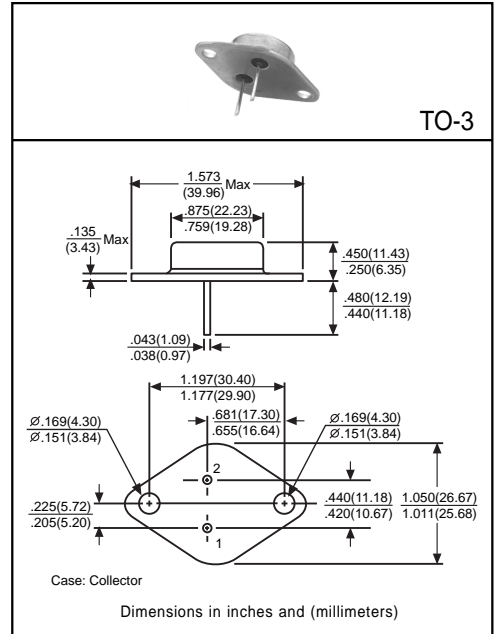
Designed for power switching circuits, series and shunt regulators, output stages and high fidelity amplifiers.

Pinning

- 1 = Base
- 2 = Emitter
- Case = Collector

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-100	V
Collector-Emitter Voltage	V _{CE0}	-60	V
	V _{CEV}	-70	V
Emitter-Base Voltage	V _{EBO}	-7	V
Collector Current	I _C	-15	A
Base Current	I _B	-7	A
Total Power Dissipation (T _C =25°C)	P _D	115	W
Junction Temperature	T _J	+200	°C
Storage Temperature	T _{STG}	-65 to +200	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Emitter Sustaining Voltage	V _{CE0(sus)}	-60	-	-	V	I _C =-0.2A, I _B =0
	V _{CEV(sus)}	-70	-	-	V	I _C =-0.2A, R _{BE} =100Ω
Collector Cutoff Current	I _{CEO}	-	-	-0.7	mA	V _{CE} =-30V, I _B =0
	I _{CEX}	-	-	-1	mA	V _{CE} =-100V, V _{BE(off)} =-1.5V
		-	-	-5	mA	V _{CE} =-100V, V _{BE(off)} =-1.5V, T _C =150°C
Emitter Cutoff Current	I _{EBO}	-	-	-5	mA	V _{BE} =-7V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)1}	-	-	-1.1	V	I _C =-4A, I _B =-0.4A
	V _{CE(sat)2}	-	-	-3	V	I _C =-10A, I _B =-3.3A
Base-Emitter On Voltage ⁽¹⁾	V _{BE(on)}	-	-	-1.5	V	I _C =-4A, V _{CE} =-4V
DC Current Gain ⁽¹⁾	h _{FE1}	20	-	70	-	I _C =-4A, V _{CE} =-4V
	h _{FE2}	5	-	-	-	I _C =-10A, V _{CE} =-4V
Second Breakdown Collector with Base Forward Bias	I _{S/b}	-2.87	-	-	A	V _{CE} =-40V, t=1.0s, Non-repetitive
Current Gain - Bandwidth Product	f _T	2.5	-	-	MHz	I _C =-0.5A, V _{CE} =-10V, f=1MHz
Small-Signal Current Gain	h _{fe}	15	-	120	-	I _C =-10A, V _{CE} =-4V, f=1KHz
Small-Signal Current Gain Cutoff Frequency	f _{hfe}	10	-	-	KHz	I _C =-1A, V _{CE} =-4V, f=1KHz

(1) Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2%