DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SD880

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

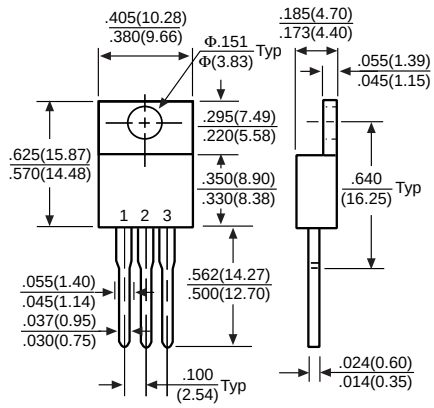
Description

Designed for low frequency power amplifier applications.

Pinning

1 = Base
2 = Collector
3 = Emitter

TO-220AB



Dimensions in inches and (millimeters)

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	3	A
Base Current	I_B	0.5	A
Total Power Dissipation	P_D	1.5	W
Total Power Dissipation(T_C=25°C)	P_D	30	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 Volatge	BV_{CBO}	60	-	-	V	I_C=1mA, I_E=0
Collector-Emitter Breakdown Voltage	BV_{CEO}	60	-	-	V	I_C=50mA, I_B=0
Collector Cutoff Current	I_{CBO}	-	-	0.1	mA	V_{CB}=60V, I_E=0
Emitter Cutoff Current	I_{EBO}	-	-	0.1	mA	V_{EB}=7V, I_C=0
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)}$	-	-	1	V	I_C=3A, I_B=0.3A
Base-Emitter On Voltage(1)	$V_{BE(on)}$	-	-	1	V	I_C=0.5A, V_{CE}=5V
DC Current Gain(1)	h_{FE}	60	-	300	-	I_C=0.5A, V_{CE}=5V
Transition Frequency	f_T	-	3	-	MHz	I_C=0.5A, V_{CE}=5V

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

Classification of h_{FE}

Rank	O	Y	GR
Range	60~120	100~200	150~300