2SD1073

FUJI POWER TRANSISTOR

TRIPLE DIFFUSED PLANER TYPE
HIGH POWER DARLINGTON
HIGH VOLTAGE POWER AMPLIFIER

■ Features

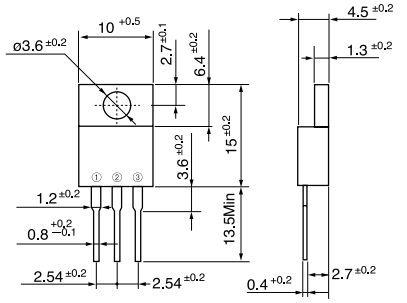
- High D.C. current gain
- Low saturation voltage
- High reliability

■ Applications

- Audio power amplifiers
- Relay & solenoid drivers
- Motor controls
- General purpose power amplifiers

■ Outline Drawings

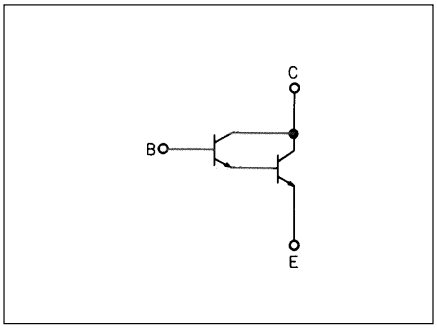
TO-220AB



1 : Base
2 : Collector
3 : Emitter

JEDEC	TO-220AB
EIAJ	SC-46

■ Equivalent Circuit Schematic



■ Maximum ratings and characteristics

● **Absolute maximum ratings (Tc=25°C unless otherwise specified)**

Item	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	300	V
Collector-Emitter voltage	V_{CEO}	250	V
Emitter-Base voltage	V_{EBO}	30	V
Collector current	I_C	4	A
Base current	I_B	0.3	A
Collector power disspation	P_C	60	W
Operating junction temperature	T_j	+150	℃
Storage temperature	T_{stg}	-55 to +150	℃

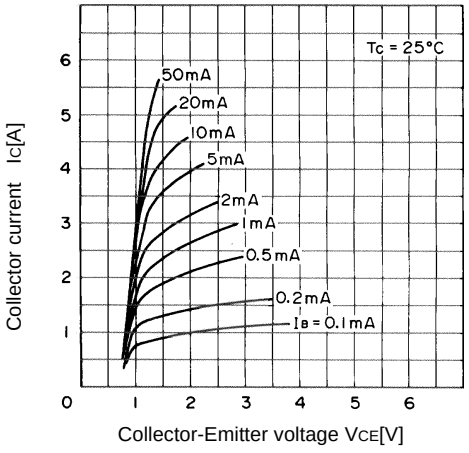
● **Electrical characteristics (T_C =25°C unless otherwise specified)**

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Collector-Base voltage	V_{CBO}	I_{CBO} = 0.1mA	300			V
Collector-Emitter voltage	V_{CEO}	I_{CEO} = 10mA	250			V
Emitter-Base voltage	V_{EBO}	I_{EBO} = 10mA	30			V
Collector-Base leakage current	I_{CBO}	V_{CBO} = 300V			0.1	mA
Emitter-Base leakage current	I_{EBO}	V_{EBO} = 30V			0.1	mA
D.C. current gain	h_{FE}	I_C = 2A, V_{CE} = 2V	1000			
Collector-Emitter saturation voltage	$V_{CE(Sat)}$	I_C = 1A, I_B = 10mA			1.5	V
Base-Emitter saturation voltage	$V_{BE(Sat)}$				2.0	V

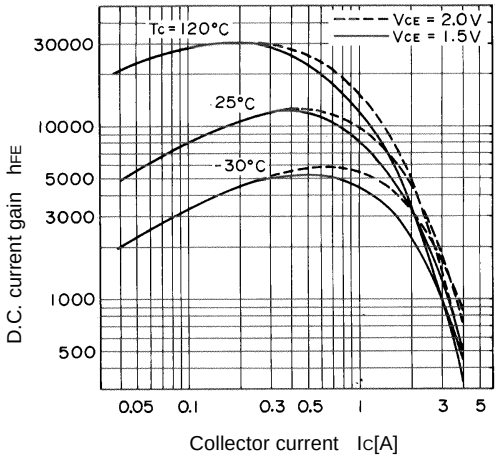
● **Thermal characteristics**

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Thermal resistance	$R_{th(j-c)}$	Junction to case			2.0	°C/W

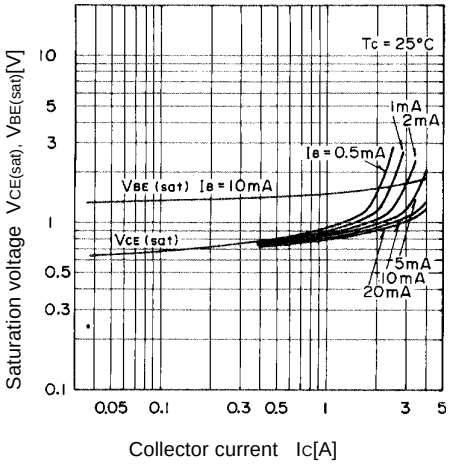
Characteristics



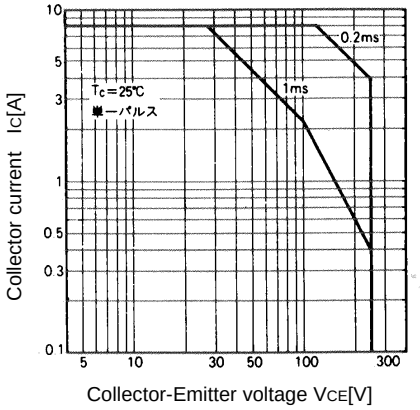
Collector Output Characteristics



DC Current Gain



Base and Collector Saturation Voltage



Safe Operating Area