

# 2SC4278

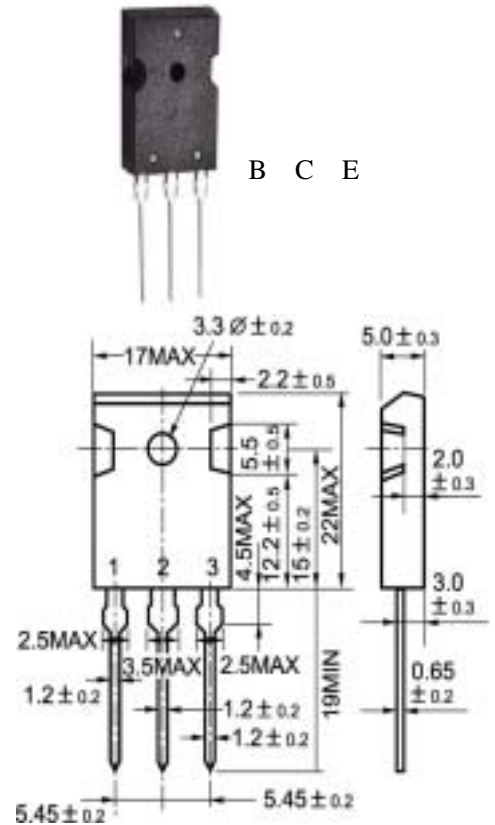
Silicon NPN Transistors

## ◆ Features

- With TO-247 package
- Complement to type 2SA1633

## ◆ Absolute Maximum Ratings Tc=25°C

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CBO</sub>	Collector to base voltage	150	V
V <sub>CEO</sub>	Collector to emitter voltage	150	V
V <sub>CER</sub>	Emitter to base voltage		
V <sub>EB</sub>	Emitter to base voltage	5	V
I <sub>B</sub>	Base Current		
I <sub>C</sub>	Collector current-Continuous	10	A
P <sub>D</sub>	Total Power Dissipation@TC=25°C Derate above 25°C	100	W W/°C
T <sub>j</sub>	Junction temperature	150	°C
T <sub>stg</sub>	Storage temperature	-65~150	°C



TO-247

## ◆ Electrical Characteristics Tc=25°C

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> =30mA; I <sub>B</sub> =0	150		V
V <sub>CBO</sub>	Collector-Base Voltage	I <sub>C</sub> =1mA; I <sub>E</sub> =0	150		V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> =150V; I <sub>B</sub> =0		500	uA
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> =150V; I <sub>E</sub> =0		100	uA
I <sub>EBO</sub>	Emitter Cutoff Current				
V <sub>EBO</sub>	Emitter Cutoff Current	I <sub>E</sub> =5mA; I <sub>C</sub> =0	5		V
V <sub>CE(sat-1)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =5A; I <sub>B</sub> =0.5A		2.0	V
V <sub>CE(sat-2)</sub>	Collector-emitter saturation voltages				
V <sub>CE(sat-3)</sub>	Collector-emitter saturation voltages				
V <sub>CE(sat-4)</sub>	Collector-emitter saturation voltages				
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =1A; V <sub>CE</sub> =5V	60	320	
h <sub>FE-2</sub>	Forward current transfer ratio				
V <sub>BE(sat)</sub>	Base-emitter Saturation voltages				
f <sub>T</sub>	Current Gain-Bandwidth Product				