

## Transistors

2SD2568

## Power Transistor(400V,0.5A)

2SD2568

## ! Features

- 1) High breakdown voltage.(BV
- <sub>CEO</sub>
- =400V)

## ! Absolute maximum ratings (Ta = 25 °C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CBO</sub>	400	V
Collector-emitter voltage	V <sub>CEO</sub>	400	V
Emitter-base voltage	V <sub>EBO</sub>	7	V
Collector current	I <sub>C</sub>	0.5	A
Collector power dissipation	P <sub>C</sub>	10	W(T <sub>c</sub> =25 °C)
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 +150	°C

! Packaging specifications and h<sub>FE</sub>

Type	2SD2568
Package	CPT3
h <sub>FE</sub>	PQ
Code	TL

## ! Electrical characteristics (Ta = 25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV <sub>CBO</sub>	400	—	—	V	I <sub>C</sub> = 50μA
Collector-emitter breakdown voltage	BV <sub>CEO</sub>	400	—	—	V	I <sub>C</sub> = 1mA
Emitter-base breakdown voltage	BV <sub>EBO</sub>	7	—	—	V	I <sub>E</sub> = 50μA
Collector cutoff current	I <sub>CB0</sub>	—	—	10	μA	V <sub>CB</sub> = 400V
Emitter cutoff current	I <sub>EB0</sub>	—	—	10	μA	V <sub>EB</sub> = 6V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	—	0.05	0.5	V	I <sub>C</sub> = 100mA , I <sub>B</sub> = 10mA
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	—	—	1.5	V	I <sub>C</sub> = 100mA , I <sub>B</sub> = 10mA
DC current transfer ratio	h <sub>FE</sub>	82	—	270	—	V <sub>CE</sub> /I <sub>C</sub> = 5V/50mA
Transition frequency	f <sub>T</sub>	—	13.5	—	MHz	V <sub>CE</sub> = 5V , I <sub>E</sub> = -50mA , f = 10MHz
Output capacitance	C <sub>ob</sub>	—	8	—	pF	V <sub>CB</sub> = 10V , I <sub>E</sub> = 0A , f = 1MHz