

Power Transistor(400V,0.5A)

2SD2568

●Features

- 1) High breakdown voltage.($BV_{CEO}=400V$)

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	400	V
Collector-emitter voltage	V_{CEO}	400	V
Emitter-base voltage	V_{EBO}	7	V
Collector current	I_C	0.5	A
Collector power dissipation	P_C	10	W($T_C=25^\circ\text{C}$)
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

●Packaging specifications and h_{FE}

Type	2SD2568
Package	CPT3
h_{FE}	PQ
Code	TL
Basic ordering unit (pieces)	2500

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	400	–	–	V	$I_C = 50\mu\text{A}$
Collector-emitter breakdown voltage	BV_{CEO}	400	–	–	V	$I_C = 1\text{mA}$
Emitter-base breakdown voltage	BV_{EBO}	7	–	–	V	$I_E = 50\mu\text{A}$
Collector cutoff current	I_{CBO}	–	–	10	μA	$V_{CB} = 400V$
Emitter cutoff current	I_{EBO}	–	–	10	μA	$V_{EB} = 6V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	0.05	0.5	V	$I_C = 100\text{mA}$, $I_B = 10\text{mA}$
Base-emitter saturation voltage	$V_{BE(sat)}$	–	–	1.5	V	$I_C = 100\text{mA}$, $I_B = 10\text{mA}$
DC current transfer ratio	h_{FE}	82	–	270	–	$V_{CE}/I_C = 5V/50\text{mA}$
Transition frequency	f_T	–	13.5	–	MHz	$V_{CE} = 5V$, $I_E = -50\text{mA}$, $f = 10\text{MHz}$
Output capacitance	C_{ob}	–	8	–	pF	$V_{CB} = 10V$, $I_E = 0A$, $f = 1\text{MHz}$