

Power Transistor(400V,0.5A)

2SD2568

! Features

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

! Absolute maximum ratings ($T_a = 25^\circ C$)

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($T_c=25^\circ C$)
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	-55 +150	$^\circ C$

! Packaging specifications and h_{FE}

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

! Electrical characteristics ($T_a = 25^\circ C$)

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