

Transistors

[查询"2SD2611"供应商](#)

Power Transistor (80V, 7A)

2SD2611

● Features

- 1) Low saturation voltage, typically $V_{CE(sat)} = 0.3V$ at $I_C / I_B = 4 / 0.4A$.
- 2) Excellent DC current gain characteristics.
- 3) $P_c = 30W$ ($T_c = 25^\circ C$)
- 4) Wide SOA (safe operating area).
- 5) Complements the 2SB1672.

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

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	100	V
Collector-emitter voltage	V_{CEO}	80	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	7 10	A(DC) A(Pulse) *
Collector power dissipation	P_c	2 30	W W($T_c=25^\circ C$)
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 – +150	$^\circ C$

*Single pulse, $P_w=100ms$

● Packaging specifications and h_{FE}

Type	2SD2611
Package	TO-220FN
h_{FE}	DEF
Code	-
Basic ordering unit (pieces)	500

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	100	–	–	V	$I_C = 50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	80	–	–	V	$I_C = 1mA$
Emitter-base breakdown voltage	BV_{EBO}	5	–	–	V	$I_E = 50\mu A$
Collector cutoff current	I_{CBO}	–	–	10	μA	$V_{CB} = 100V$
Emitter cutoff current	I_{EBO}	–	–	10	μA	$V_{EB} = 4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	–	1	V	$I_C/I_B = 4A/0.4A$ *
Base-emitter saturation voltage	$V_{BE(sat)}$	–	–	1.5	V	$I_C/I_B = 4A/0.4A$ *
DC current transfer ratio	h_{FE}	60	–	320	–	$V_{CE} = 5V, I_C = 1A$ *
Transition frequency	f_T	–	5	–	MHz	$V_{CE} = 5V, I_E = -0.5A, f = 5MHz$ *
Output capacitance	C_{ob}	–	150	–	pF	$V_{CB} = 10V, I_E = 0A, f = 1MHz$ *

*Measured using pulse current