

Power Transistor (80V, 4A)

2SC5574

●Features

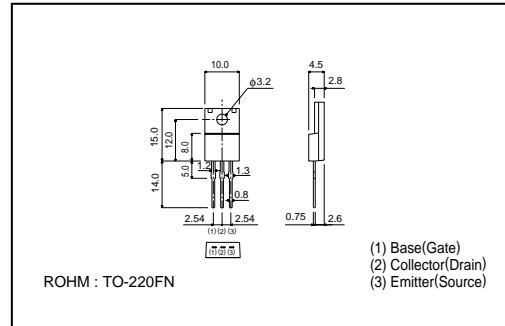
- 1) Low saturation voltage.
(Typ. $V_{CE(sat)} = 0.3V$ at $I_C / I_B = 2 / 0.2A$)
- 2) Excellent DC current gain characteristics.
- 3) $P_C = 30W$ ($T_C = 25^\circ C$)
- 4) Wide SOA (safe operating area).
- 5) Complements the 2SA2017.

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

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CB0}	100	V
Collector-emitter voltage	V_{CE0}	80	V
Emitter-base voltage	V_{EB0}	6	V
Collector current	I_C	4	A(DC)
		6	A(Pulse) *
Collector power dissipation	P_C	2	W
		30	W($T_C = 25^\circ C$)
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ C$

* Single pulse, $P_w = 100ms$

●External dimensions (Units : mm)



●Packaging specifications and h_{FE}

Type	2SC5574
Package	TO-220FN
h_{FE}	EFG
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_{CB0}	100	-	-	V	$I_C = 50\mu A$
Collector-emitter breakdown voltage	BV_{CE0}	80	-	-	V	$I_C = 25mA$
Emitter-base breakdown voltage	BV_{EB0}	6	-	-	V	$I_E = 50\mu A$
Collector cutoff current	I_{CBO}	-	-	10	μA	$V_{CB} = 100V$
Emitter cutoff current	I_{EBO}	-	-	10	μA	$V_{EB} = 6V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	1	V	$I_C / I_B = 2A / 0.2A$ *
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-	1.5	V	$I_C / I_E = 2A / 0.2A$ *
DC current transfer ratio	h_{FE}	100	-	500	-	$V_{CE} / I_C = 4V / 1A$
Transition frequency	f_T	-	10	-	MHz	$V_{CE} = 12V, I_E = -0.2A, f = 5MHz$ *
Output capacitance	C_{ob}	-	60	-	pF	$V_{CB} = 10V, I_E = 0A, f = 1MHz$

* Measured using pulse current