

High-voltage Switching (Audio output amplifier transistor, Stabilized power supply transistor)

2SC5248

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{cb0}	160	V
Collector-emitter voltage	V _{ce0}	160	V
Emitter-base voltage	V _{eb0}	5	V
Collector current	I _c	1.5	A
Collector power dissipation	P _c	2	W
Junction temperature	T _j	20	W (T _c =25°C)
Storage temperature	T _{stg}	150	°C
		-55~150	°C

- ### ●Features
- 1) Flat DC current gain characteristics.
 - 2) High breakdown voltage. (BV_{ceo}=160V)
 - 3) High f_r. (Typ. 150MHz)
 - 4) Wide SOA (safe operating area).
 - 5) Complements the 2SA1964.

●Packaging specifications and h_{FE}

Type	2SC5248
Package	TO-220FP
h _{FE}	DE
Code	—
Basic ordering unit (pieces)	500

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV _{ceo}	160	—	—	V	I _c =1mA
Collector-base breakdown voltage	BV _{cbo}	160	—	—	V	I _c =50 μA
Emitter-base breakdown voltage	BV _{ebo}	5	—	—	V	I _e =50 μA
Collector cutoff current	I _{ceo}	—	—	1	μA	V _{cb} =160V
Emitter cutoff current	I _{ebo}	—	—	1	μA	V _{eb} =4V
Collector-emitter saturation voltage	V _{ce(sat)}	—	—	1	V	I _c /I _e =1A/0.1A
DC current transfer ratio	h _{FE}	60	—	200	—	V _{ce} =5V, I _c =0.1A
Transition frequency	f _r	—	150	—	MHz	V _{ce} =10V, I _c =0.2A, f=100MHz
Output capacitance	C _{ob}	—	20	—	pF	V _{ce} =10V, I _c =0A, f=1MHz