

# High-voltage Switching

## (Audio output amplifier transistor, TV velocity modulation transistor)

### (160V, 1.5A)

## 2SC5511

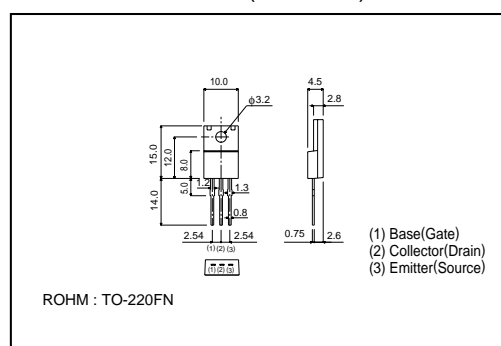
### ●Features

- 1) Flat DC current gain characteristics.
- 2) High breakdown voltage. ( $BV_{CEO} = 160V$ )
- 3) High fr. (Typ. 150MHz)
- 4) Wide SOA (safe operating area).
- 5) Complements the 2SA2005.

### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	$V_{CBO}$	160	V
Collector-emitter voltage	$V_{CEO}$	160	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	1.5	A
Collector power dissipation	$P_C$	2	W
		20	W (Tc = 25°C)
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{stg}$	-55~+150	°C

### ●External dimensions (Units : mm)



### ●Packaging specifications and hFE

Type	2SC5511
Package	TO-220FN
hFE	DE
Code	-
Basic ordering unit	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	$I_C = 50\mu A$
Emitter-base breakdown voltage	$BV_{EBO}$	5	-	-	V	$I_E = 50\mu A$
Collector cutoff current	$I_{CBO}$	-	-	1	$\mu A$	$V_{CB} = 160V$
Emitter cutoff current	$I_{EBO}$	-	-	1	$\mu A$	$V_{EB} = 4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	1	V	$I_C/I_B = 1A/0.1A$
DC current transfer ratio	hFE	60	-	200	-	$V_{CE} = 5V, I_C = 0.1A$
Transition frequency	fr	-	150	-	MHz	$V_{CE} = 10V, I_E = 0.2A, f = 100MHz$
Output capacitance	Cob	-	35	-	pF	$V_{CB} = 10V, I_E = 0A, f = 1MHz$