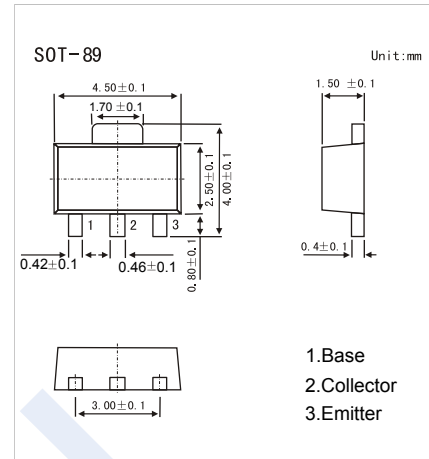


## NPN Transistors

### 2SC2884-HF

#### ■ Features

- Suitable for output stage of 1 watts amplifier
- Small flat package
- $P_c = 1.0$  to  $2.0$  W (mounted on a ceramic substrate)
- Complementary to 2SA1204-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	35	V
Collector - Emitter Voltage	$V_{CE0}$	30	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_c$	800	mA
Base Current	$I_B$	160	
Collector Power Dissipation (Note.1)	$P_c$	500 1000	mW
Junction Temperature	$T_J$	150	
Storage Temperature Range	$T_{stg}$	-55 to 150	

Note.1: Mounted on a ceramic substrate ( $250\text{ mm}^2 \times 0.8\text{ t}$ )

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c = 1\text{ mA}, I_E = 0$	35			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c = 10\text{ mA}, I_B = 0$	30			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 1\text{ mA}, I_c = 0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 35\text{ V}, I_E = 0$			0.1	uA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{ V}, I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 500\text{ mA}, I_B = 20\text{ mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 500\text{ mA}, I_B = 20\text{ mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 1\text{ V}, I_c = 10\text{ mA}$	0.5		0.8	
DC current gain	$h_{FE}$	$V_{CE} = 1\text{ V}, I_c = 100\text{ mA}$	100		320	
		$V_{CE} = 1\text{ V}, I_c = 700\text{ mA}$	35			
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		13		pF
Transition frequency	$f_t$	$V_{CE} = 5\text{ V}, I_c = 10\text{ mA}$		120		MHz

#### ■ Classification of $h_{fe}(1)$

Type	2SC2884-O-HF	2SC2884-Y-HF
Range	100-200	160-320
Marking	PO* <sub>F</sub>	PY* <sub>F</sub>

## NPN Transistors

### 2SC2884-HF

■ Typical Characteristics

