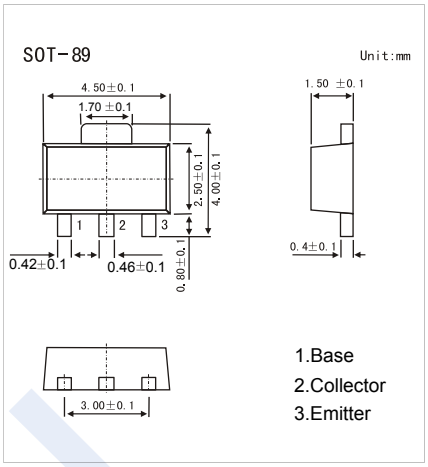
NPN Transistors

2SC2884

■ 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



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	35	V
Collector - Emitter Voltage	V_{CEO}	30	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	800	mA
BaseCurrent	I_B	160	
Collector Power Dissipation (Note.1)	P_C	500	mW
		1000	
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

Note.1:Mounted on a ceramic substrate (250 mm^2 × 0.8 t)

■ Electrical Characteristics Ta = 25℃

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

■ Classification of $h_{fe(1)}$

Type	2SC2884-O	2SC28844-Y
Range	100-200	160-320
Marking	PO*	PY*

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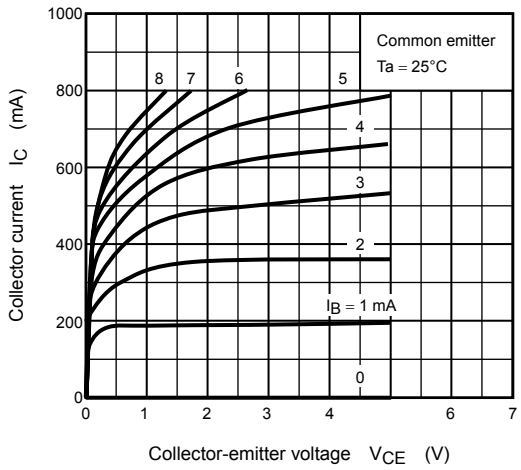
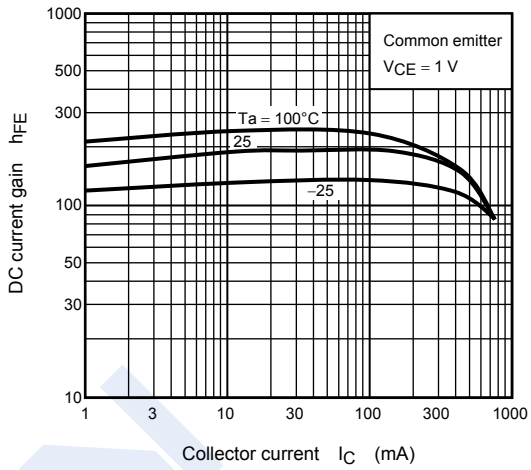
■ Typical Characterisitics

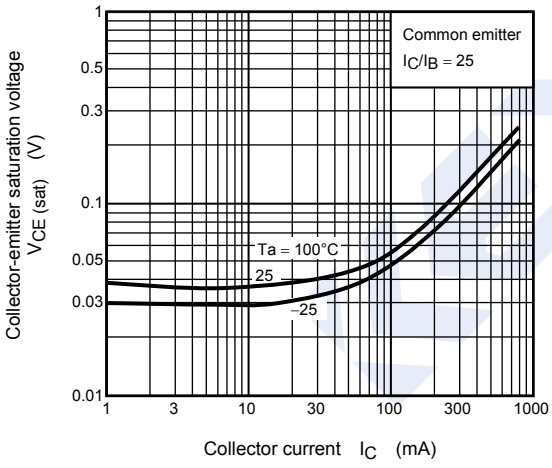
$I_C - V_{CE}$



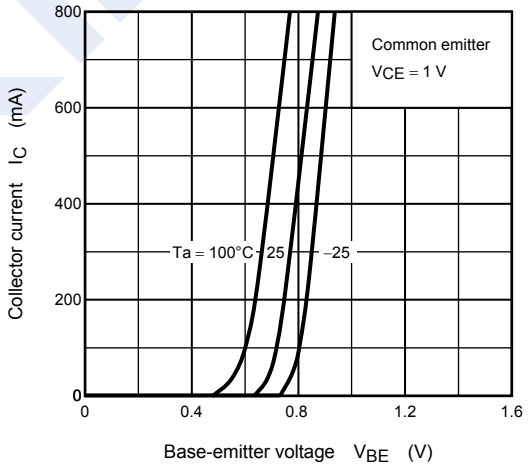
$h_{FE} - I_C$



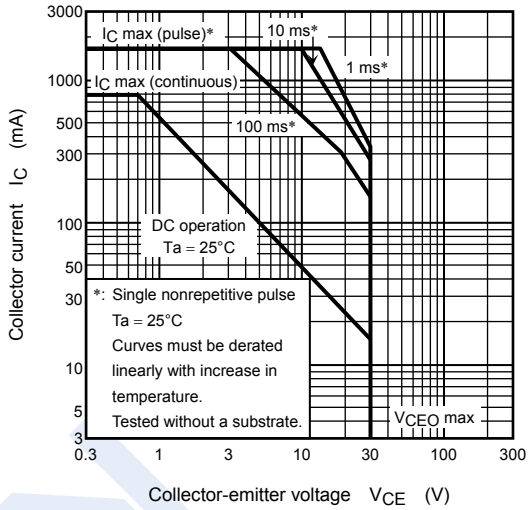
$V_{CE\ (sat)} - I_C$



$I_C - V_{BE}$



Safe Operating Area



$P_C - Ta$

