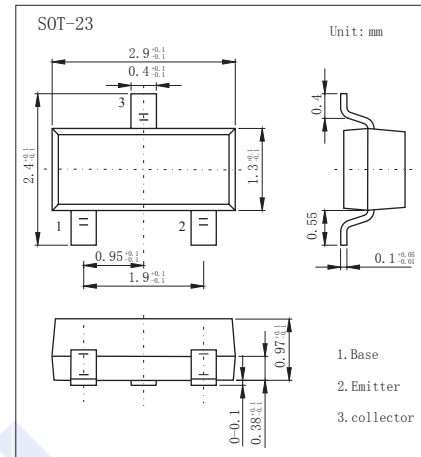


NPN Transistors

2SC3440

■ Features

- Low collector to emitter saturation voltage.
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting.
- High collector current.
- Complementary to 2SA1365

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	25	V
Collector - Emitter Voltage	V_{CE0}	20	
Emitter - Base Voltage	V_{EB0}	4	
Collector Current - Continuous	I_C	700	mA
Peak Collector Current	I_{CM}	1	A
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 125	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100 \mu\text{A}$, $I_E = 0$	25			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 100 \mu\text{A}$, $R_{BE} = \infty$	20			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu\text{A}$, $I_C = 0$	4			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 25 \text{ V}$, $I_E = 0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4 \text{ V}$, $I_C = 0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500 \text{ mA}$, $I_B = 25 \text{ mA}$		0.2	0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500 \text{ mA}$, $I_B = 25 \text{ mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 4 \text{ V}$, $I_C = 100 \text{ mA}$	150		800	
Transition frequency	f_T	$V_{CE} = 6 \text{ V}$, $I_C = 10 \text{ mA}$		180		MHz

■ Classification of h_{FE}

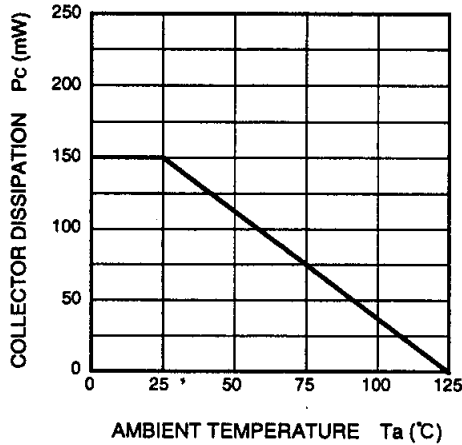
Type	2SC3340-E	2SC3340-F	2SC3340-G
Range	150-300	250-500	400-800
Marking	BE	BF	BG

NPN Transistors

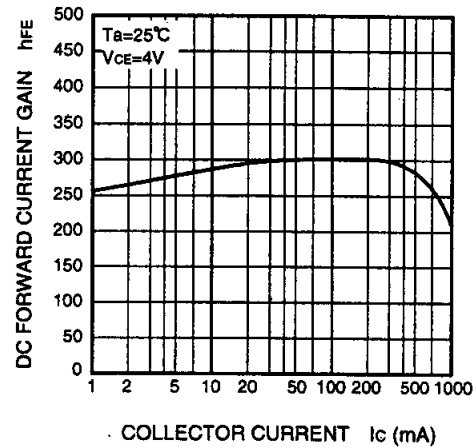
2SC3440

■ Typical Characteristics

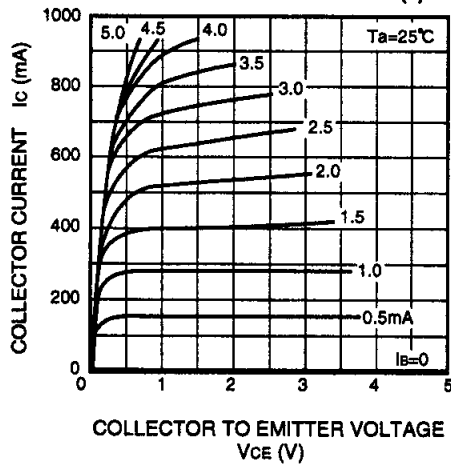
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



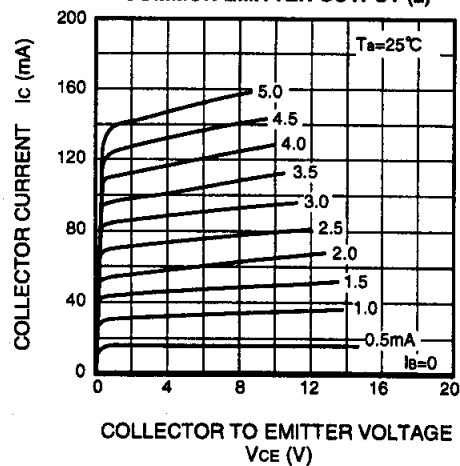
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



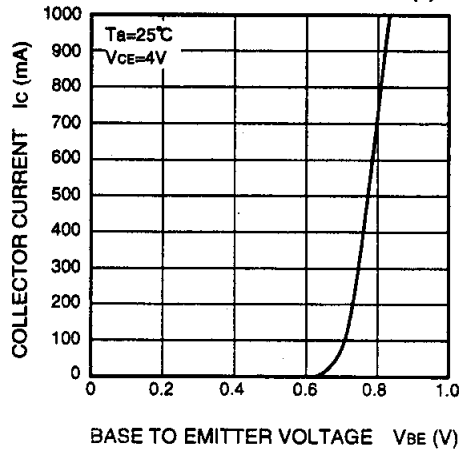
COMMON EMITTER OUTPUT (1)



COMMON EMITTER OUTPUT (2)



COMMON EMITTER TRANSFER (1)



COMMON EMITTER TRANSFER (2)

