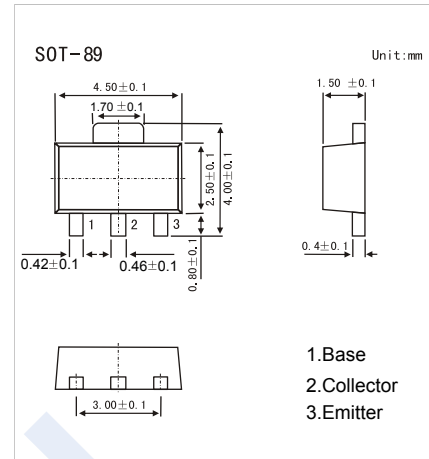


NPN Transistors

2SC3443

■ Features

- High h_{FE} : h_{FE} =150 to 800
- High collector current
- Low collector to emitter saturation voltage
- High collector dissipation P_c =500mW
- Small package for mounting
- Complementary to 2SA1363

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	20	V
Collector - Emitter Voltage	V_{CE0}	16	
Emitter - Base Voltage	V_{EB0}	6	
Collector Current - Continuous	I_C	2	A
Peak Collector Current	I_{CM}	3	
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100\mu\text{A}$, $I_E = 0$	20			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 2\text{mA}$, $R_{BE} = \infty$	16			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100\mu\text{A}$, $I_C = 0$	6			
Collector-base cut-off current	I_{CB0}	$V_{CB} = 16\text{V}$, $I_E = 0$			0.2	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = 4\text{V}$, $I_C = 0$			0.2	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1\text{A}$, $I_B = 500\text{mA}$		0.17	0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 1\text{A}$, $I_B = 500\text{mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 4\text{V}$, $I_C = 100\text{mA}$	150		800	
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		28		pF
Transition frequency	f_T	$V_{CE} = 2\text{V}$, $I_C = 10\text{mA}$		80		MHz

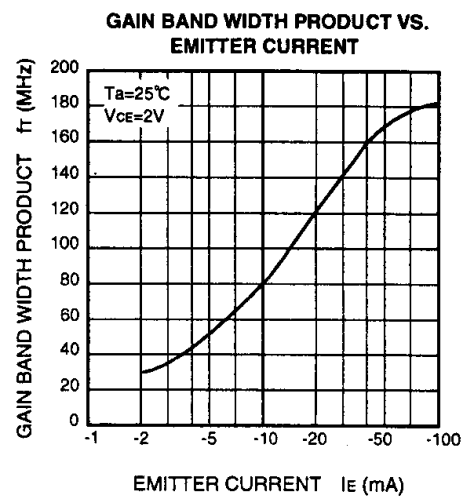
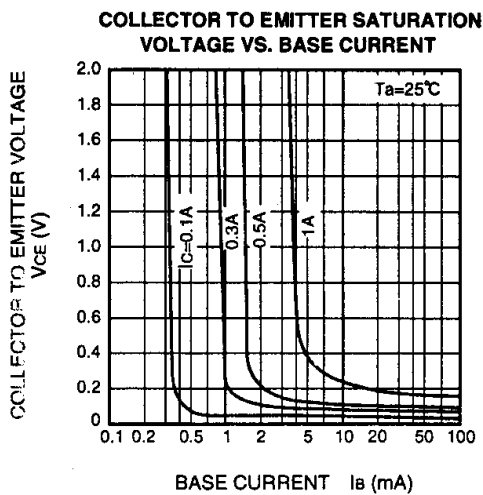
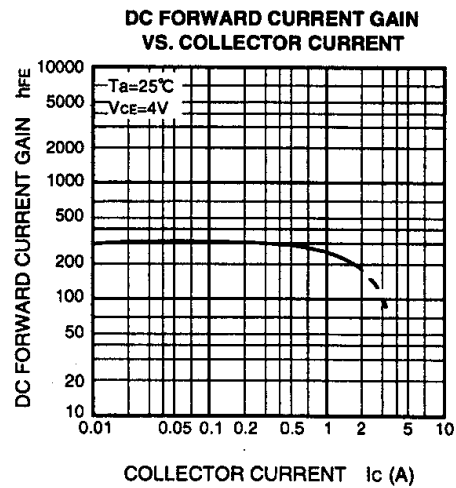
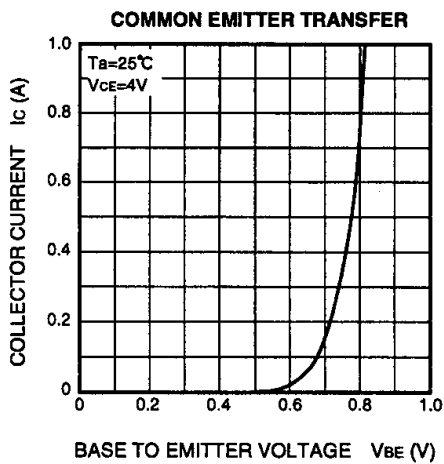
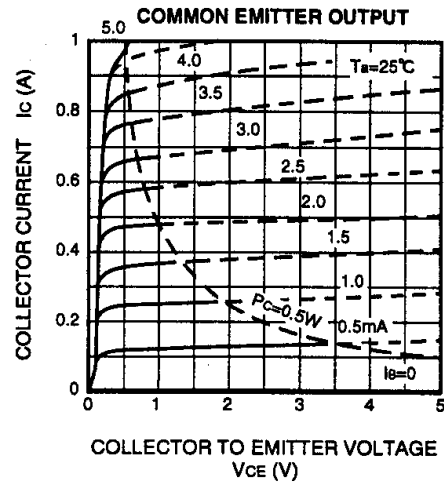
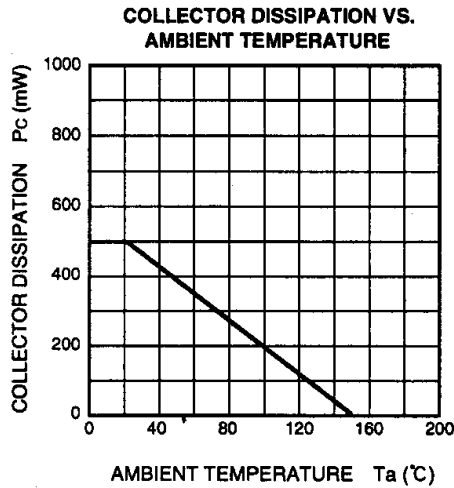
■ Classification of h_{FE}

Marking	BE	BF	BG
Range	150-300	250-500	400-800

NPN Transistors

2SC3443

■ Typical Characteristics



NPN Transistors

2SC3443

■ Typical Characteristics

