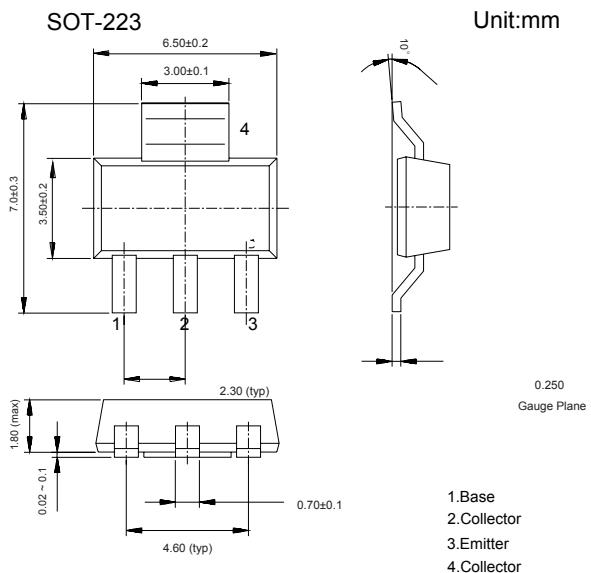
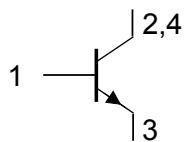


■ Features

- High current (max. 1 A)
- Low voltage (max. 20 V)



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CBO}	32	
Collector - Emitter Voltage	V _{CEO}	20	V
Emitter - Base Voltage	V _{EBO}	5	
Collector Current - Continuous	I _C	1	
Collector Current - Pulse	I _{CP}	2	A
Base Current - Pulse	I _{BP}	0.2	
Collector Power Dissipation	P _C	1.37	W
Thermal Resistance from Junction to Ambient	R _{θJA}	91	
Thermal Resistance from Junction to Soldering Point	R _{θJS}	10	°C/W
Junction Temperature	T _J	150	
Storage Temperature range	T _{stg}	-65 to 150	°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_c = 100 \mu\text{A}, I_E = 0$	32			
Collector-emitter breakdown voltage	V_{CEO}	$I_c = 1 \text{ mA}, I_B = 0$	20			
Emitter-base breakdown voltage	V_{EBO}	$I_E = 100 \mu\text{A}, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 25 \text{ V}, I_E = 0$			100	nA
		$V_{CB} = 25 \text{ V}, I_E = 0, T_J = 150^\circ\text{C}$			10	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			100	nA
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_c = 1 \text{ A}, I_B = 100\text{mA}$			0.5	
Base-emitter saturation voltage	$V_{BE(\text{sat})}$	$I_c = 1 \text{ A}, I_B = 100\text{mA}$			1.2	
Base-emitter voltage	V_{BE}	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$		0.62		
		$V_{CE} = 1\text{V}, I_C = 1 \text{ A}$			1	
DC current gain	h_{FE}	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$	50			
		$V_{CE} = 1\text{V}, I_C = 500\text{mA}$	85		375	
		$V_{CE} = 1\text{V}, I_C = 1 \text{ A}$	60			
Collector capacitance	C_{ob}	$V_{CB} = 5\text{V}, I_E = I_B = 0, f = 1\text{MHz}$		38		pF
Transition frequency	f_T	$V_{CE} = 5\text{V}, I_C = 10\text{mA}, f = 100\text{MHz}$	40			MHz

■ Typical Characteristics

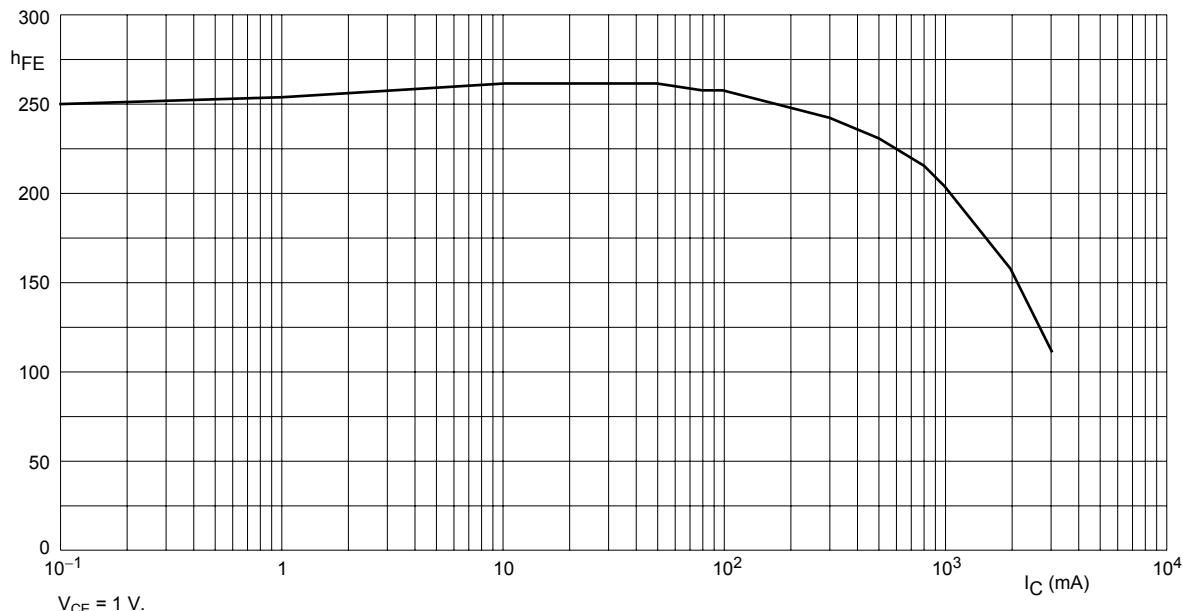


Fig.1 DC current gain; typical values.