2SC2859

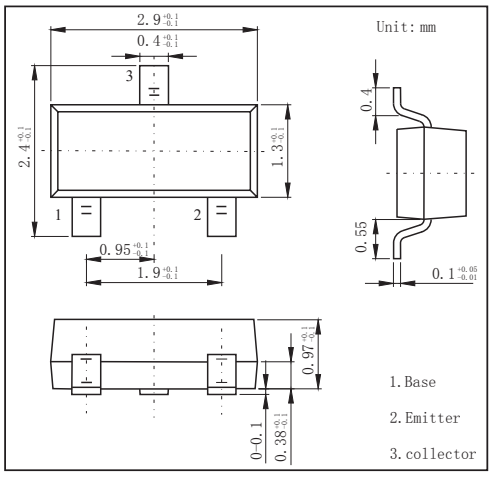
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Excellent hFE Linearity:
  hFE(2)=25(min) (VCE=6V,IC=400mA)
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

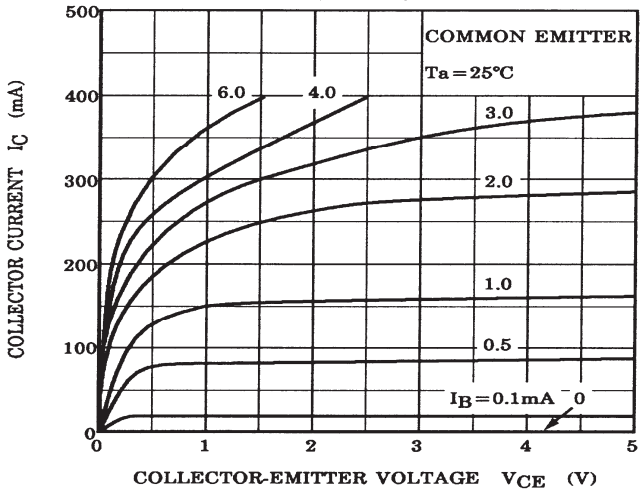
@ 25°C Ambient Temperature (unless otherwise noted)

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	500	mA
Base Current	I_B	50	
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	125	℃
Storage Temperature Range	T_{stg}	-55 to□15□	

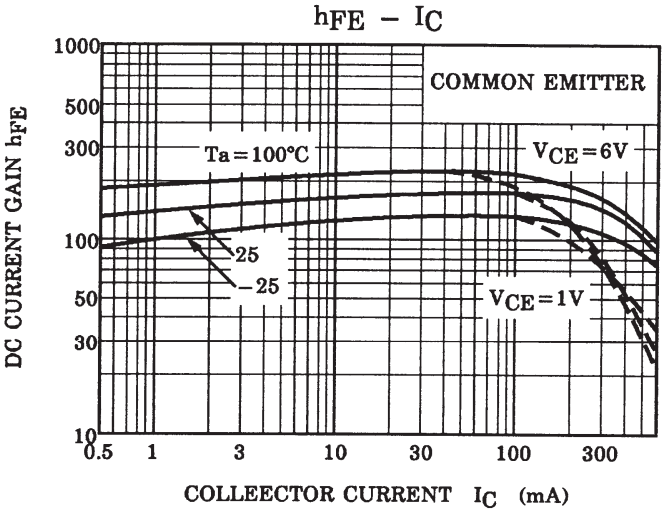
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	VCBO	Ic= 100 μA， IE= 0	35			V
Collector- emitter breakdown voltage	VCEO	Ic= 1 mA， IB= 0	30			
Emitter - base breakdown voltage	VEBO	IE= 100 μ A， IC= 0	5			
Collector-base cut-off current	ICBO	VCB= 35V , IE= 0			0.1	uA
Emitter cut-off current	IEBO	VEB= 5V , IC=0			0.1	
Collector-emitter saturation voltage	VCE(sat)	IC=100 mA, IB=10mA		0.1	0.25	V
Base - emitter saturation voltage	VBE(sat)	IC=100 mA, IB=10mA			1.2	
Base - emitter voltage	VBE	VCE= 1V, IC= 100mA		0.8	1	
DC current gain	hFE(1)	VCE= 1V, IC= 100mA	70		400	
	hFE(2)	VCE= 6V, IC= 400mA	25			
Collector output capacitance	Cob	VCB= 6V, IE= 0,f=1MHz		7		pF
Transition frequency	fT	VCE= 6V, IC= 20mA		300		MHz

RATINGS AND CHARACTERISTIC CURVES

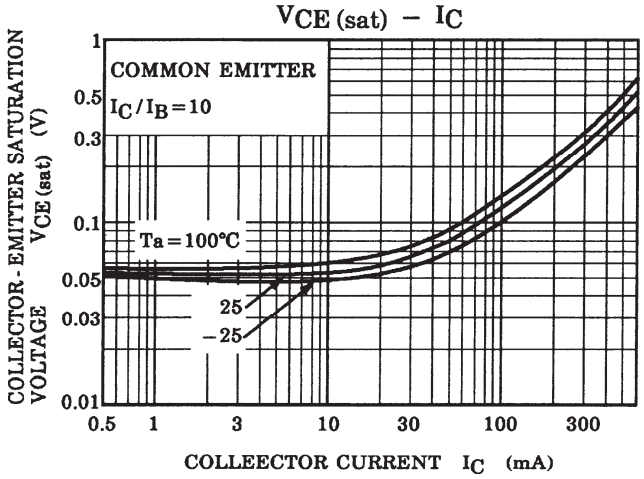
I_C – V_{CE}



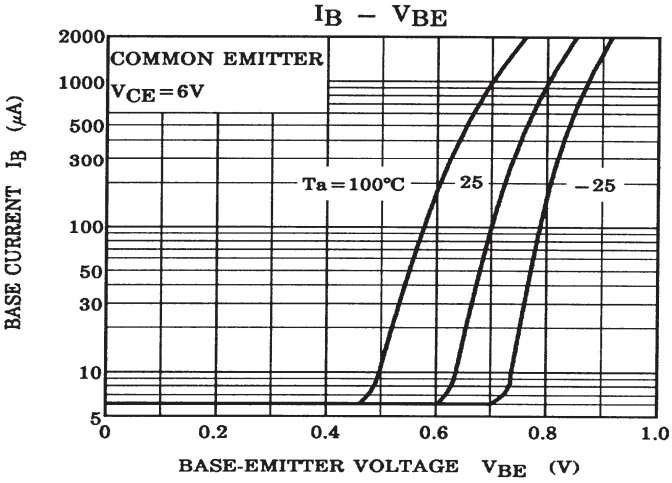
h_{FE} – I_C



$V_{CE\,(sat)}$ – I_C



I_B – V_{BE}



P_C – Ta