

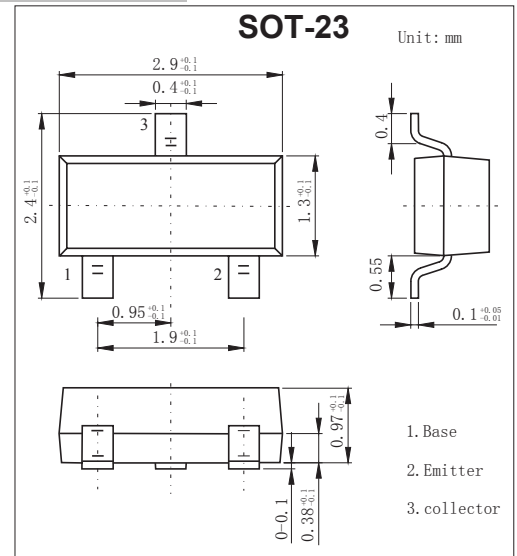
SOT-23 Plastic-Encapsulate Transistors

Features

- Excellent h_{FE} Linearity:
 $h_{FE}(2)=25(\min)$ ($V_{CE}=6V, I_C=400mA$)
- Complementary to 2SA1182

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	°C
Storage Temperature Range	T_{stg}	-55 to 125	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C=100\mu A, I_E=0$	35			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C=1mA, I_B=0$	30			
Emitter - base breakdown voltage	V_{EBO}	$I_E=100\mu A, I_C=0$	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	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$			1.2	
Base - emitter voltage	V_{BE}	$V_{CE}=1V, I_C=100mA$		0.8	1	
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=100mA$	70		400	
	$h_{FE(2)}$	$V_{CE}=6V, I_C=400mA$ O	25			
		Y	40			
		G	70			
Collector output capacitance	C_{ob}	$V_{CB}=6V, I_E=0, f=1MHz$		7		pF
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA$		300		MHz

Classification of $h_{FE(1)}$

Type	2SC2859-O	2SC2859-Y	2SC2859-G
Range	70-140	120-240	200-400
Marking	WO	WY	WG

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics

