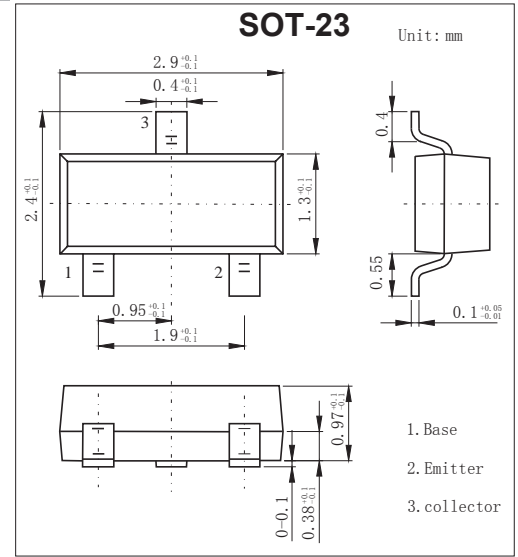


**SOT-23 Plastic-Encapsulate Transistors**
**Features**

- Excellent  $h_{FE}$  Linearity:  
 $h_{FE(2)}=25(\text{min})$  ( $V_{CE}=6V, I_C=400\text{mA}$ )
- 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	$V_{CB0}$	35	V
Collector - Emitter Voltage	$V_{CE0}$	30	
Emitter - Base Voltage	$V_{EB0}$	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	$V_{CB0}$	$I_C=100\mu A, I_E=0$	35			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C=1\text{ mA}, I_B=0$	30			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E=100\mu A, I_C=0$	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	$V_{CE(sat)}$	$I_C=100\text{ mA}, I_B=10\text{mA}$		0.1	0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{ mA}, I_B=10\text{mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE}=1V, I_C=100\text{mA}$		0.8	1	
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=100\text{mA}$	70		400	
		$V_{CE}=6V, I_C=400\text{mA}$	O	25		
			Y	40		
		G	70			
Collector output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1\text{MHz}$		7		pF
Transition frequency	$f_T$	$V_{CE}=6V, I_C=20\text{mA}$		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

