

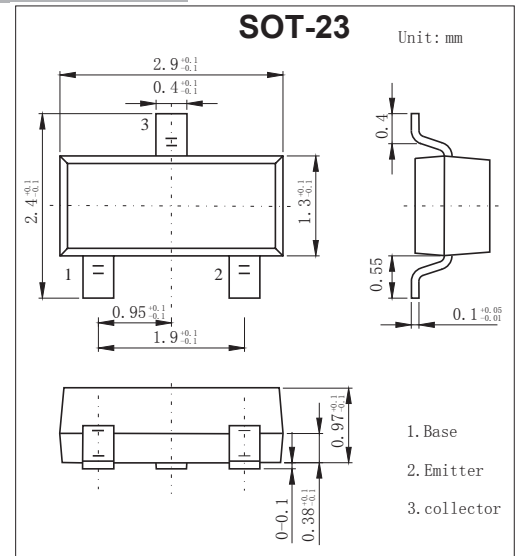
SOT-23 Plastic-Encapsulate Transistors

Features

- Excellent hFE Linearity:
hFE(2)=25(min) (VCE=6V, IC=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 _{CB0}	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 _{CB0}	I _C = 100 μA, I _E = 0	35			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 1 mA, I _B = 0	30			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100 μA, 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 mA, I _B =10mA		0.1	0.25	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =100 mA, I _B =10mA			1.2	
Base - emitter voltage	V _{BE}	V _{CE} = 1V, I _C = 100mA		0.8	1	
DC current gain	hFE(1)	V _{CE} = 1V, I _C = 100mA	70		400	
		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 hfe(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

