

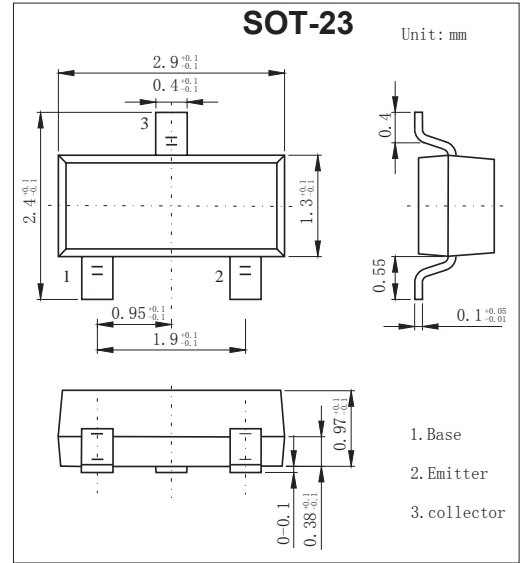
SOT-23 Plastic-Encapsulate Transistors

Features

- High hFE
- Low VCE(sat)
- For general amplification
- Complimentary to 2SB709A
- NPN Transistors

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}	60	V
Collector - Emitter Voltage	V _{CE0}	50	
Emitter - Base Voltage	V _{EB0}	7	
Collector Current - Continuous	I _c	100	mA
Collector Power Dissipation	P _c	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
2SD601A	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = 2 mA, I _B = 0	50			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _c = 0	7			
Collector-base cut-off current	I _{CB0}	V _{CB} = 50 V, I _E = 0			0.1	μA
Collector-emitter cut-off current	I _{CE0}	V _{CE} = 30 V, I _B = 0			100	
Emitter cut-off current	I _{EB0}	V _{EB} = 5V, I _c =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =100 mA, I _B =10mA			0.3	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c =100 mA, I _B =10mA			1.2	
DC current gain	h _{FE(1)}	V _{CE} = 2V, I _c = 100mA	90			
	h _{FE(2)}	V _{CE} = 10V, I _c = 2mA	160		460	
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E =0, f=1MHz		3.5		pF
Transition frequency	f _t	V _{CE} = 10V, I _c = 2mA, f=200MHz		150		MHz

Classification of h_{FE(2)}

Type	2SD601A-Q	2SD601A-R	2SD601A-S
Range	160-260	210-340	290-460
Marking	ZQ	ZR	ZS