

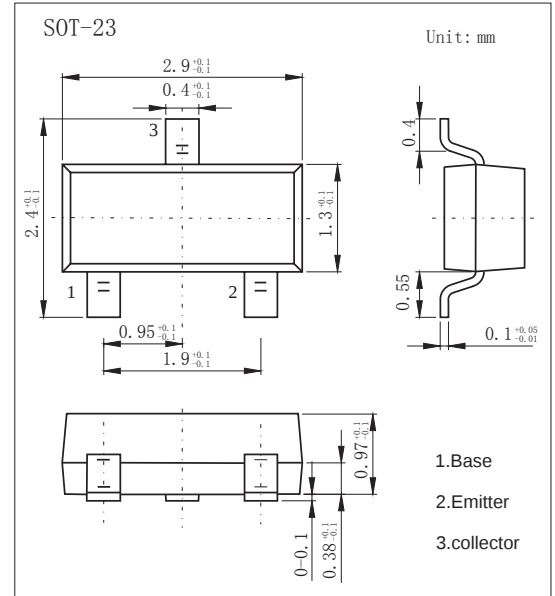
SOT-23 Plastic-Encapsulate Transistors

Features

- Collector Current Capability $I_C=0.6A$
- Collector Emitter Voltage $V_{CEO}=140V$
- High Voltage Transistor
- 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_{CBO}	160	V
Collector - Emitter Voltage	V_{CEO}	140	
Emitter - Base Voltage	V_{EBO}	6	
Collector Current - Continuous	I_C	0.6	A
Collector Power Dissipation	P_C	225	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
2SA1298	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E = 0$	160			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 mA, I_B = 0$	140			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu A, I_C = 0$	6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 100 V, I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4 V, I_C = 0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10 mA, I_B = 1 mA$			0.15	V
		$I_C = 50 mA, I_B = 5 mA$			0.25	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10 mA, I_B = 1 mA$			1	
		$I_C = 50 mA, I_B = 5 mA$			1.2	
DC current gain	h_{FE}	$V_{CE} = 5 V, I_C = 1 mA$	60			
		$V_{CE} = 5 V, I_C = 10 mA$	60		250	
		$V_{CE} = 5 V, I_C = 50 mA$	20			

Note.: Pulse test: pulse width $\leq 300 \mu s$, duty cycle $\leq 2.0\%$.

Marking

Marking	M1F
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