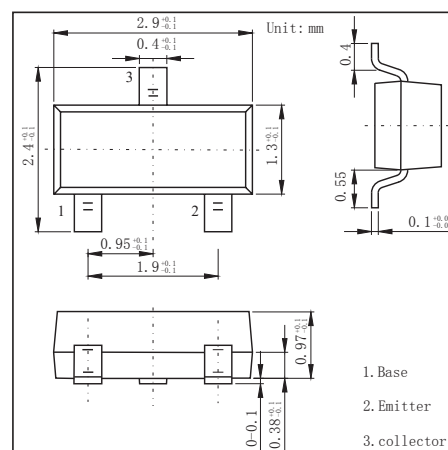


**SOT-23 Plastic-Encapsulate Transistors**
**FEATURES**

- Collector Current Capability  $I_C=200\text{mA}$
- Collector Emitter Voltage  $V_{CEO}=15\text{V}$
- TRANSNPN Transistors

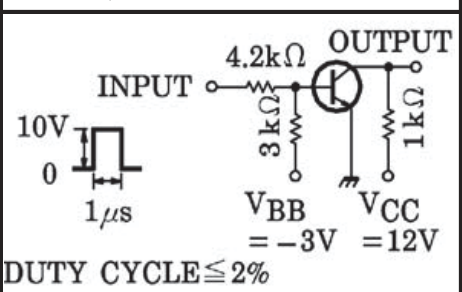
**MECHANICAL DATA**

- 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	$V_{CB0}$	40	V
Collector - Emitter Voltage	$V_{CEO}$	15	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current	$I_C$	200	mA
Base Current	$I_B$	40	
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	$V_{CB0}$	$I_C=100\mu\text{A}, I_E=0$	40			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C=1\text{mA}, I_B=0$	15			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E=100\mu\text{A}, I_C=0$	5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB}=40\text{V}, I_E=0$			0.1	uA
Emitter cut-off current	$I_{EB0}$	$V_{EB}=5\text{V}, I_C=0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=20\text{mA}, I_B=1\text{mA}$			0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=20\text{mA}, I_B=1\text{mA}$			1	
DC current gain	$h_{FE}$	$V_{CE}=1\text{V}, I_C=10\text{mA}$	40		240	
		$V_{CE}=1\text{V}, I_C=100\text{mA}$	20			
Turn-on time	$t_{on}$			70	ns	
Storage time	$t_{stg}$		15			
Fall time	$t_f$		30			
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			6	pF
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	200			MHz

RATINGS AND CHARACTERISTIC CURVES

