

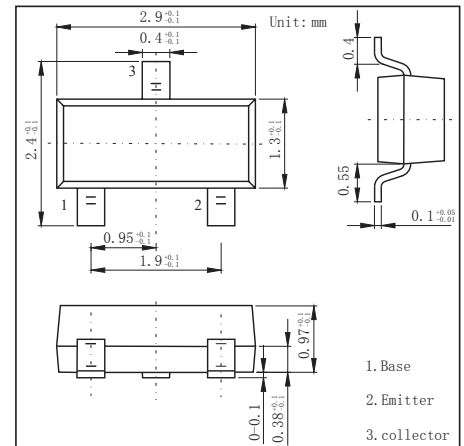
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Collector Current Capability $I_C=200\text{mA}$
- Collector Emitter Voltage $V_{CE0}=15\text{V}$
- TRANSNPN Transistors

MECHANICAL DATA

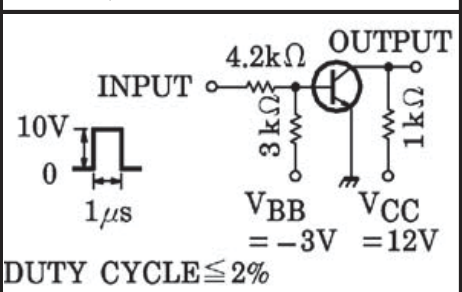
- Case style:SOT-23molded plastic
- Mounting position:any



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_{CE0}	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_{CE0}	$I_C=1\text{mA}$, $I_B=0$	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

